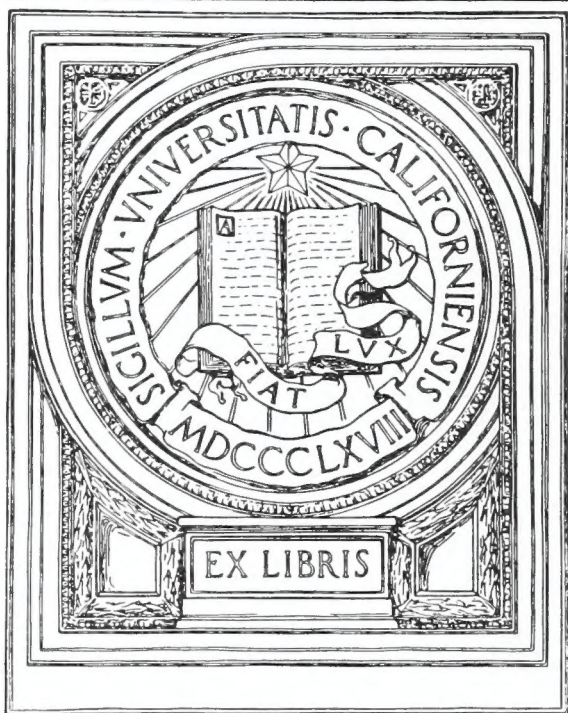



UNIVERSITY OF CALIFORNIA
SAN FRANCISCO
LIBRARY



EX LIBRIS



Digitized by the Internet Archive
in 2017 with funding from
The National Endowment for the Humanities and the Arcadia Fund

<https://archive.org/details/hawaiimedicaljou46unse>

JANUARY 1987
VOL. 46, NO. 1

Hawaii MEDICAL JOURNAL

CONTENTS

From the President	4
Walter W.Y. Chang, MD	
This is My Mana'o	6
J.I. Frederick Reppun, MD	
Editorials:	9
More on Nurses	
J.I. Frederick Reppun, MD	
HMA Salutes Mrs. Betty Katsuki	
Henry Yokoyama, MD	
Extracorporeal Shock Wave Lithotripsy	10
William J. Yarbrough, MD	
Instructions to Authors, Hawaii Medical Journal	12
Endourologic Treatment of Urinary Tract Stones	15
William J. Yarbrough, MD	
Walter S. Strode, MD	
Medical Malpractice in the State of Hawaii (1979 - 1984)	19
Jean Kadooka Mardfin	
Cost-Containment and Communication with Patients	24
Harry K. Davis, MD	
Continuing Education	25
News & Notes	29
Henry Yokoyama, MD	
Over the Editor's Desk	33
J.I. Frederick Reppun, MD	
HMSA Answers Physicians' Questions	34



U OF CA-SAN FRANCISCO
THE LIBRARY
ACQUISITIONS DIVISION
SAN FRANCISCO, CA 94143

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo) 329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**

HAWAII MEDICAL JOURNAL

(USPS 237-640)

Published Monthly for the
HAWAII MEDICAL ASSOCIATION
(Incorporated in 1856 under the Monarchy)
320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD
Founding Editor: HARRY L. ARNOLD JR., MD
News Editor: HENRY N. YOKOYAMA, MD
Consulting Editor: DORIS R. JASINSKI, MD, MPH
Assistant Editor and Book Review Editor:
DOUGLAS G. MASSEY, MD
Contributing Editors: JOHN M. CORBOY, MD,
FRANCIS H. FUKUNAGA, MD,
CHARLES S. JUDD, JR., MD,
Editorial Assistants: BECKY KENDRO,
Managing Editor: CHARLOTTE BEAL
Editorial Assistants: BECKY KENDRO,
JUDI KINGREY
Copy Editor: GWENDOLYN CHANG HULLEMAN
Graphic Artist: J. CHARLES DAVIS

Editorial Board

NORMAN GOLDSTEIN, MD,
THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,
JAMES LUMENG, MD, FRANCIS D. PIEN, MD
Publications Committee: CHARLOTTE M. FLORINE, MD
(Commissioner)
HENRY N. YOKOYAMA, MD
(Chairman)
STEPHEN R.P.K. BRADY, MD, NATHANIEL P.H.
CHING, MD,
FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,
JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,
JAMES P. MCGUIRE, MD, DAMKERNG PATHOM-
VANICH, MD,
ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,
J.I. FREDERICK REPPUN, MD, TERRY C.Y. WONG,
MD,
ELLA EDWARDS (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD
President-Elect: JAMES LUMENG, MD
Past President: RUSSELL T. STODD, MD
Secretary: JOHN KIM, MD
Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: BEN I.M. HUR, MD
Honolulu: PHILIP McNAMEE, MD
Kauai: THOMAS GROLLMAN, MD
Maui: MILTON YOLLES, MD
West Hawaii: EDWIN P. GRAMLICH, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD
CALVIN C.M. KAM, MD
Alternate Delegates to AMA
WALTER W.Y. CHANG, MD
RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.
Post Office Box 833
Honolulu, Hawaii 96808
Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.
16 Bruce Park Avenue
Greenwich, Connecticut 06830
Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.

TAX-FREE INCOME

YOU WANT IT!



WE PROVIDE IT!

HAWAIIAN TAX-FREE TRUST

... provides you with a high level of tax-free income—free from *both* State of Hawaii and Federal income taxes.*

Plus a lot *more*...

- Strong Stability of Capital**
- Low Initial Investment of \$1,000
- Automatic Dividend Reinvestment
- Daily Liquidity
- Frequent Statements and Reports

The Trust is designed *especially* for Hawaii residents. It is the only locally managed mutual fund which invests in Hawaii tax-exempt municipal bonds—the kind of bonds which finance hospitals, roads, harbors and airports throughout our *State*.

This means you get the benefit of *double tax-free* income with many conveniences. And, through your investment, the Trust helps finance needed projects right here in Hawaii.

HAWAIIAN TAX-FREE TRUST... for *akamai* investors

FOR INFORMATION

Contact Your Local Investment Broker

OR CALL

1-800-228-4227

TOLL-FREE FROM HAWAII 7 DAYS A WEEK, 24 HOURS A DAY

Aquila Distributors, Inc., 200 Park Avenue, New York, NY 10017

You will be sent free descriptive material and a prospectus containing more complete information including management fees and expenses. Read carefully before you invest or send money.

INVESTMENT ADVISOR

Hawaiian Trust Company, Ltd.

A Trust and Investment Company of

Bancorp Hawaii

*Under certain market conditions some income may be subject to state and federal tax.

**Share price will vary somewhat with interest rate market fluctuations.

If you do business in Hawaii...

and want to keep on top of civil cases in our courts, or tax liens, public hearings, incorporations and partnerships, or almost anything else of value in your practice

... we have news for you



**PACIFIC
BUSINESS
NEWS**

For information call 521-0021.



FROM THE PRESIDENT

New Medical Issues Face A New Administration

Hawaii's Legislature will open in mid-January 1987 under the leadership of a new governor. Hopefully your Hawaii Medical Association will be able to maintain a close working relationship with the new administration.

An important concern at this time has to do with the strengthening of the Board of Medical Examiners' role and procedures. Physicians have always supported high standards of medical practice and believe that incompetency has no role in the providing of services to our patients. Although the proposed changes do have certain areas that may be objectionable, it is nevertheless a positive step forward. These concerns will be communicated to the Board of Medical Examiners and the Legislature.

Tort reform will also be pursued in hopes that minor changes

will be made in legislation passed last year. Unfortunately, major changes will unlikely be undertaken due to the "newness" of the act.

HMA's leadership, staff and legislative committee need your help to implement any changes. We need to develop a cadre of interested and concerned physicians who are both willing to do committee work and to give testimony at the Legislature. We are urging specialty societies to become involved by identifying their members who are willing to become involved in our legislative activities. Lastly the different factions of medicine need to come together and coordinate their legislative efforts to avoid needless duplication.

Walter W.Y. Chang, MD
President



High Performance from Pacific Basin Investments

109.3%

NOMURA PACIFIC BASIN FUND

- 109.3% return for shareholders since the fund's inception.*
- Experienced professional management by Nomura Capital Management, Inc., an affiliate of The Nomura Securities Co., Ltd., the world's largest securities firm.
- The Fund's objective is long-term capital appreciation of investments in the emerging economies of Pacific Basin countries.
- No sales charge.
- No redemption charge.
- \$20,000 minimum investment.

* Total return (July 8, 1985 to August 31, 1986) based on change in share price, reinvestment of dividends and capital gains distributions. Favorable currency exchange rates during this period contributed significantly to the total return. Past performance is no guarantee of future results.

For more information about the Fund, including charges and expenses, call the number below or mail the coupon for a free prospectus. Read the prospectus carefully before investing or sending money. Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.



(808) 538-3837

Persons-in-charge:

Call Sharon Kaya or Russell Oki



NOMURA SECURITIES INTERNATIONAL, INC.

Honolulu Office: (808) 538-3837

Persons in Charge: Sharon Kaya & Russell Oki

1001 Bishop Street, Pacific Tower, Suite 2760, Honolulu, HI 96813

Please send a prospectus detailing the Nomura Pacific Fund, Inc.

Name _____

Address _____

City _____

State _____

Zip _____

Business phone () _____

Home phone () _____

Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.
Member SIPC

HMJ

This is My Mana'o

The 130th annual meeting of the HMA at the Westin-Ilikai in Waikiki on Oct. 10, 11, and 12, 1986, was perhaps more notable for the excellence of the scientific session and for the staging of the Presidential Inauguration Ceremony than for what the House of Delegates (HOD) accomplished in its deliberations.

It is difficult to decide how those deliberations, the reports of the commissioners and committees that spent long hours throughout the year of Russ Stodd's administration in working for HMA and its members, the reports of its officers, the minutes of the council meetings, the report of its executive director, Jon Won, the work of the three reference committees, and the adoption, modification, or rejection of the only six resolutions submitted by members — how all this can be reported in brief.

Our readers may forgive us if we follow the agenda of the three reference committees, which thrashed out all the items in the delegates handbook, seeking input from the relatively few members who gave testimony to them.

We were disappointed in the format of the reference committee reports to the HOD. Obviously in an attempt to shorten the proceedings of the HOD and stay within the time frame of the meeting, the reports of the reference committee were abbreviated to an extent that the gravity of the proceedings suffered and we suspect the rush to get things over with overwhelmed deliberate review by the delegates. True, there was nothing very controversial to stir up particular interest in the meeting, but perhaps there should have been, considering the difficult times in which organized medicine finds itself nowadays.

As an aside, we must comment on the attendance of delegates and members. Poor! The Neighbor Islands delegations are almost invariably filled and faithful; the delegation from HCMS makes a farce of the electoral process! Almost any member of HCMS who happens to be around, gets to be seated. The long list of elected delegates and alternates is to no avail. The "election" seems to impose no sense of responsibility! "Democracy" is abandoned. When members (or non-members) complain that the HMA (or the AMA) is exclusive and in-bred, it is a self-fulfilling prophecy.

So here we go!

Reference Committee on Finance and Administration

Some demographic data from secretary Jim Lumeng: As of Aug. 31 we have 1,710 members, an increase of 77 over the year before. The ratio of members to practicing physicians in Hawaii is 61%; 727 members are also members of the AMA.

The *President's Report* and recommendations by Russ Stodd were well-received. The HOD liked his suggestion of a new standing committee to be formed, promoting wellness, fitness, good health or whatever; we favor the name "Wellness Committee," but that will be left to the new committee to decide.

The HOD also liked his idea of allowing one HMA staff member to serve as a "legislative intern" with a Hawaii State legislator. However, we wonder how this would fit in; at the 1986 session, HMA was represented by a full-time paid lobbyist

(Charles Ushijima, attorney and ex-legislator), by Dick Lundborg, HMA member who was paid only his room and travel expenses, Becky Kendro, and Ray Higa, HMA staff members. The concept has real merit, however.

The *Building Committee Report* by Allan Kunimoto passed with flying colors and HMA's new home on Beretania St. near Keeaumoku is already well on its way to being constructed. If HMA members would only participate in the "promising venture" by purchasing shares as "Limited Partners," funding will be assured on favorable terms and for once our dues structure may see a reduction — in about 10 years!

There was no objection to the *Report of the Treasurer and the Finance Committee* that established a balanced budget and recommended a dues increase (from \$490) to \$505/annum (the AMA did not raise its dues this year). We were a bit confused over the budget being balanced, in view of the several budget requests submitted to the HOD, but put our trust and faith in the reassurances voiced by Jon Won and our officers. The books are open to any member to peruse. Of course!

The *Community Research Bureau* — a 501(c)3 entity of the HMA — was given \$10,000 by the HOD (it's in the budget) to get started with a charitable "educational" fund to which members may contribute so that the HMA may expand its medical/educational activities. (We think the HMA has been, heretofore, too much of a "guild" for the benefit of its members and not doing enough for our community!) However, based on the experience of similar offshoots of national organizations, 501(c)3 entities are slow to grow; the new tax laws have additionally confused taxpayers regarding contributions to charities, deferred giving/endowments.

At this (130th) meeting, the HOD made certain that a *Hospital Medical Staff Section* is implemented within the structure of the HMA; it had been authorized a year ago.

Reference Committee on Miscellaneous Business

We were happy to note that the HOD approved the appointment of Charlotte Beal of the HMA staff as *managing editor* of the JOURNAL, which is a job she has naturally taken on anyway and voluntarily since she came aboard as public relations director for HMA.

Also approved was the recommendation that \$200 be included in the budget to be expended as payment for reports of important medical meetings in the community attended and reported by students at the JAB School of Medicine at UH, and approved for publication in the JOURNAL.

The *Awards/Media Committee* under John McDonnell recommended continuing the expenditure of \$1,100 in the budget and this was approved. HMA thus recognizes the contributions to good medical-import writing and speaking in the media within our community.

As mentioned above, the budget of the *Legislative Committee*, \$13,000, was approved. This committee under Charles H. Yamashiro, as well as Bill Hindle's *Task Force on Tort Reform* and his *Community Forum on Tort Reform* performed

yeoman's service on behalf of all Hawaii physicians. They labored mightily at the Legislature; but the latter produced a mouse. Even the efforts of then Lt. Gov. John Waihee and a special legislative session succeeded only, charitably speaking, in perhaps opening the tent flap enough to let the camel's (HMA) nose in for future efforts hopefully to show some measure of success. HMA membership participation in this effort was great and the \$25,505 raised is an indication of this imua within HMA. However, we feel the thrust of it was more in favor of ourselves rather than for our patients.

Reference Committee on Public Health: Commissioner George Mills (*Commission on Community, Professional Relations, and Peer Review*) was one who gave a lengthy report and made some cogent recommendations. George's main pitch was to urge the HMA to fund the travel expenses of Neighbor Island committee members (see below). This was probably the only in-house issue that might have generated controversy, but by promising that the council would give it serious thought, the HOD evaded a debate.

The *CME Committee's* budget allocation is a large \$2,500 but this is more than offset by the income it generates (\$3,265) by processing applications for Category I credit. Paul DeMare and his committee have worked very hard at this major effort of HMA to promote updating of physician's expertise — members and non-members alike.

Tom Kosasa's *Health Manpower Committee* came through with a revised HMA/JABSM agreement that brought town and gown closer together. The school will graduate 56 MDs a year for now, 90% of them of local origin.

The *Medical, Ethical, Moral, and Legal Concerns Committee* (MEMLCC — wow!) under Elizabeth Adams, which concerns itself with the "Living Will" legislation, had asked for a budget of \$3,800, nearly half of which was to finance interisland travel of committees and members. The HOD was saved a debate on the issue brought up by George Mills (see above) by being told that the council had already approved and included in the budget \$2,600, of which \$2,000 was for purposes of disseminating educational material on Living Wills, and \$600 for "airfare, round trip, for outer-island committee members to attend one regular committee (MEMLCC) meeting." The debate on whether this sets a precedent was evaded therewith. The issue is not dead, however.

Bernice Coleman's *Physicians Committee* drew a lot of attention because of its work with "impaired" physicians in our community, fraught with difficult, sensitive moral and legal implications of a serious nature that reflect on all in the profession. The committee's recommendations were only for a budget of \$3,150. The HOD was told that the council had already reduced that to \$2,100 and had included it in the budget. Here again a reduced amount of \$600 was allowed for interisland airfare of committee members. The importance of the work of the committee surely did influence the HOD in allowing this precedent to be set once again, with George Mills' persuasiveness manifested once again (these committees were under his wing as commissioner!). The Reference Committee recommended and the HOD adopted: That the purpose and work of

this committee be widely broadcast to all physicians and that the HMA's legislative committee monitor proposals in the next session of the state Legislature anent immunity for "informers."

Cyril Goshima's *Communicable Disease Committee* requested a budget of \$4,000 to continue HMA's successful educational efforts to combat the epidemic of AIDS, including a repeat of the community-wide conference on AIDS held in 1986. The HOD had no trouble endorsing this HMA's outward project, but referred the budget request to council for a more detailed presentation.

The HOD similarly endorsed Tim Olderr's *Sports Medicine Committee's* efforts, but referred its budget request to the council (\$10,200). Another "good" HMA outreach project to promote health and safety in our sports-minded community.

The efforts of Steven Moser and his *Toxic Agents Subcommittee* to clean up our air and water in Hawaii attracted the attention of this reference committee, which added its own recommendations: That the HMA and the Cancer Commission urge the Hawaii Tumor Registry to widen its demographic base and survey the effects of toxic substance of all kinds on human beings.

The *Medicare/Medicaid Committee* under H.H. Chun gave a dismal and negative report: (1) No success in improving reimbursement to physicians who treat Medicaid patients, and (2) Gov. Ariyoshi vetoed the bill that passed both houses of the Legislature ameliorating the bad tactics of the Medicaid Fraud and Abuse Unit.

The HOD modified the name of the *HMA/HMSA Liaison Committee* to *HMA/Third-Party Liaison*, in view of the recent inroads of HMOs, PPOs, etc. into the medical economics field.

The six resolutions submitted fared as follows:

Resolution No. 1 — requiring premarital testing for HBsAg, was not adopted.

Resolution No. 2 — that the way MIEC invests its reserve funds be mandated by HMA so as not to support nuclear weapons, was felt to be inappropriate by the HOD

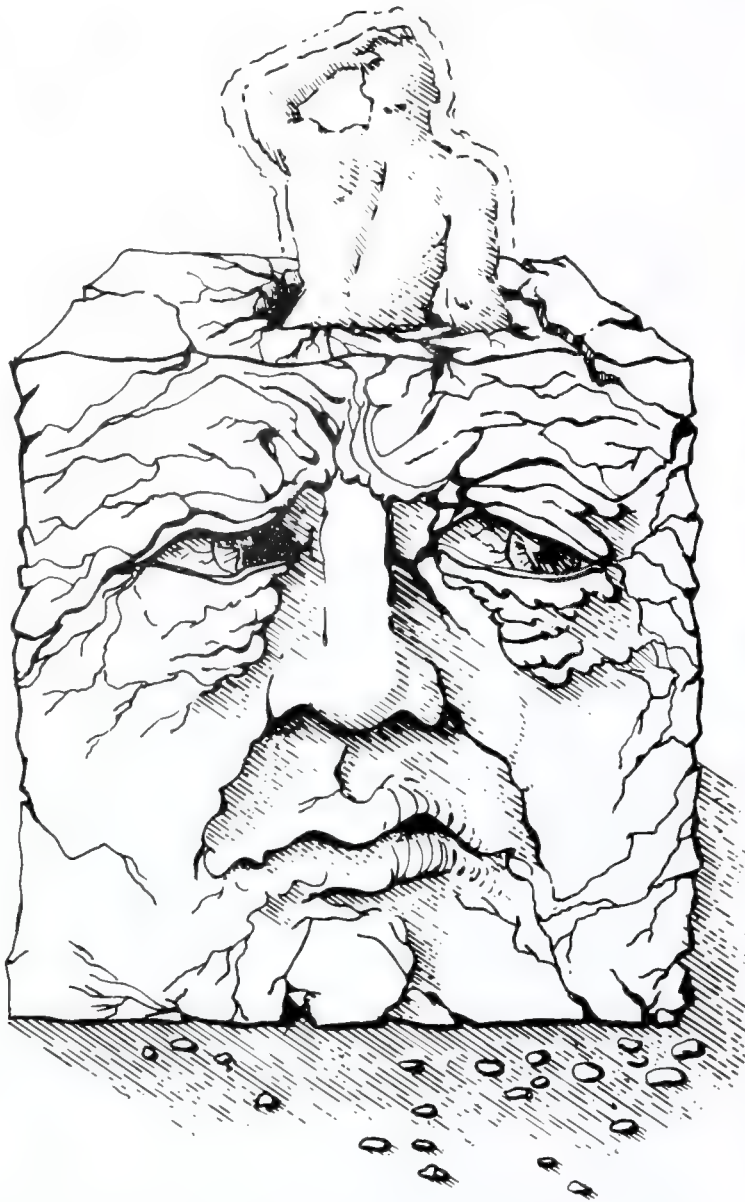
Resolution No. 3 — was amended and then adopted: That the Substance Abuse/Pharmacy Committee be separated into two committees: (1) Alcoholism and Other Substance Abuse and (2) Pharmacy. The intent was to elevate into HMA's focus the societal bad effects of alcoholism and drugs.

Resolution No. 4 — proposed an "Initiative" on the next ballot to bring tort reform up to the voters. However, since there is no provision for initiative under state law, the resolution was amended and passed: That the HMA support the creation of an initiative process to bring tort reform before the electorate.

Resolution No. 5 — urging cooperation with the Cancer Center of Hawaii by all Hawaii physicians, passed without a dissenting vote, as did

Resolution No. 6 — commending Betty Katsuki, widow of Bob Katsuki, for her years-long devotion to the in-memoriam project commemorating the doctors of Hawaii. The resolution is published in its entirety in the JOURNAL.

J.I. Frederick Reppun, MD
Editor



Do you have patients who are in **PAIN? . . .**

- always complaining?
- very emotionally demanding?
- not motivated to go back to work?
- questioning your judgement?
- dependent on medication?
- visiting physicians and healthcare providers frequently?
- alienating family and friends?

They should probably be evaluated at the PAIN CENTER.

The **PAIN CENTER** is a specialized, interdisciplinary inpatient and outpatient program which objectively evaluates and treats patients with chronic pain. For information on how to refer your PAIN patients to the **PAIN CENTER**, call:

531-3511

PAIN CENTER

Rehabilitation Hospital of the Pacific
226 N. Kuakini St.





More on Nurses

Those readers who have read the editorial in the November '86 issue of the JOURNAL: *A Dedication to All Nurses*, and who have appreciated the perceptive emotions expressed by a recent graduate RN on duty on an oncology floor, faced with a dying patient who wanted "everything possible done to keep me alive," might do well to read the *Sounding Board* in the NEJM of Nov. 6, 1986. The second article, on page 1222: *Ethical Issues: A Nursing Perspective*, was written by Charlotte Theis, RN, EdD, of Marquette University College of Nursing.

The thrust of her treatise is to remind us treating physicians that nurses are most often closer to the patient and the patient's illness than are the physicians or the hospital administration, both of the latter entities being the nurse's "overloads," so to speak.

Consequently, the nurse, as the patient's advocate as much as is the physician, needs to be respectfully consulted and included when it comes to crisis situations. The team approach is much the best in such cases and should center on what's best for the patient, at the same time bringing to bear the input from the patient, his family, his physician(s) attending, the nursing staff, and the hospital administration. Arbitrary overloadship by anyone will surely lead to acrimonious dissention.

The recent local development, supported by the Hawaii Medical Association, of establishing Medical Ethics Committees in Hawaii's hospitals, and in the HMA, should be a helpful step forward.

J.I. Frederick Reppun, MD
Editor

HMA Salutes Mrs. Betty Katsuki

HMA's House of Delegates passed the following resolution honoring Mrs. Betty Katsuki at the association's October Annual Meeting. Mrs. Katsuki, who recently moved to Montana, spent over 30 years assembling and producing "In Memoriam — Doctors of Hawaii," seven volumes of sketches containing

biographical sketches and photographs of physicians who have practiced in Hawaii and are now deceased. The Hawaii Medical Association salutes Mrs. Katsuki for her tireless efforts and dedication to the preservation of Hawaii's medical history, and congratulates her for a job *very* well done.

Resolution No. 6

Re: Mrs. Betty Katsuki

Whereas, "In Memoriam — Doctors of Hawaii" is a set of volumes containing biographical sketches and photographs of doctors who have practiced in Hawaii and are now deceased, and

Whereas, this year marks the 30th year since this project was begun by the Hawaii Medical Association Auxiliary, and

Whereas, there are now seven volumes of "In Memoriam" containing information on 621 doctors dating from the early 1800s up to 1985 and 407 photographs, and

Whereas, Mrs. Betty (Robert) Katsuki has served as Auxiliary Chairman of this project since its inception and has combined her lifelong fascination with history and her early plans for a career as a librarian to produce a rare and valued set of volumes for the enrichment of not only the medical profession but also the public at large, and

Whereas, the HMA Auxiliary has honored Betty by publish-

ing an Index to the "In Memoriam" volumes, which is kept in the Hawaii Medical Library and a copy has been given to each of the medical societies,

Now Therefore Be It Resolved, by the House of Delegates, that the HMA deeply appreciates what Betty has done and thanks her for the years of tireless service to the In-Memoriam project, and

Be It Further Resolved that this Resolution be published in the HAWAII MEDICAL JOURNAL and a copy sent to Betty with our fond aloha at her new home in Montana, so that she, too, will be remembered in history for the caring devotion she gave to the In-Memoriam project and to the doctors of Hawaii.

Henry Yokoyama, MD

Extracorporeal Shock Wave Lithotripsy

William J. Yarbrough, MD*

Urolithiasis is a painful, often incapacitating condition that periodically requires surgical intervention for the management of renal or ureteral obstruction, infection, or intractable pain. Surgically active renal and ureteral calculi have traditionally been removed or disintegrated using open surgery, percutaneous, and other endoscopic techniques.

In the early '80s, technological advances in fluoroscopy and improvements in endoscopic instruments dramatically changed the field of urology by eliminating the need for many open surgical procedures. Extracorporeal shock wave lithotripsy (ESWL), a relatively new technology that uses shock waves to disintegrate renal and upper ureteral calculi into fragments small enough to pass from the body through the urinary tract, is currently having as pervasive an effect upon the management of upper urinary calculi. As the only procedure for stone removal that is completely non-invasive, ESWL is rapidly becoming the treatment of choice. Experts believe that lithotripsy, alone or in conjunction with percutaneous nephrolithotomy, percutaneous nephrostomy, or ureterorenoscopy, is appropriate for all upper urinary stones that require surgical intervention.

Apparatus and Procedure

The Dornier lithotripter is the only unit to have received market approval from the Food and Drug Administration. In this model, the patient is placed under general or epidural anesthesia, set on the remote-control support platform, and immersed in a bath of warm, degassed demineralized water. The shock waves used to fragment the stone are generated by a spark gap, underwater electrode and focused by an ellipsoidal reflector located beneath the electrode. The reflector focuses the wave energy and converges it on a point 23 centimeters above the electrode. At this focal point, the pressure of the shock wave (approximately 15,000 pounds per square inch) is capable of fragmenting calculi of varying composition.

Biplanar fluoroscopy is used to visualize the stone and to aid

the urologist in positioning the patient so the stone is at the point of maximum energy. (Radiation emitted by these fluoroscopic units during ESWL treatment is less than that recorded for intravenous pyelogram.) When the patient is properly positioned, shock wave treatment is initiated. The delivery of shock waves is synchronized with the patient's heart rate by electrocardiography. The shock waves are triggered by the R wave of the patient's EKG and are timed to fire with every heartbeat, alternate heartbeats, or every third heartbeat. This synchronization minimizes shock wave-induced disturbances of the cardiac conduction system and eliminates the extrasystoles that were observed in approximately 80 percent of ESWL patients when delivery was manually controlled.

Shock waves are administered in series of 75 to 150 waves. Between the series, fluoroscopy is used to check the progress of stone fragmentation, monitor the position of the stone, and realign the stone if necessary. The entire procedure takes approximately one hour or up to 2,000 shock waves.

Since the acoustic properties of tissue are similar to those of water, the shock waves pass through the water-tissue interface with only slight attenuation and without causing pathological changes to the tissue. (Application of a hydrophobic substance to the shock wave entry point is recommended since it eliminates any air bubbles at the water-tissue interface that can generate acoustic impedance differentials and result in ecchymosis.) Since calculi have an acoustic impedance less than that of soft tissue or water, the shock waves are readily transmitted across the tissue-stone interface. However, the reverse is true when the shock waves reach the back wall of the stone. At this interface, the waves are reflected back into the stone. These reflected waves generate mechanical stresses in the stone, which result in its fragmentation.

Since shock waves reflect when they reach a substance with higher acoustic impedance, the body surface through which the waves exit must also be immersed to prevent ecchymotic damage to tissue. Within the body, shock waves have the potential to cause some lung damage because of the large number of air-fluid interfaces in the lungs. To date, only minor lung damage has been reported. Bone tissue is largely unaffected by lithotripsy because of its high protein content.

Accepted for publication November 1986

*Medical director of the Kidney Stone Center

Patient Selection

Prospective patients must be carefully evaluated to determine whether ESWL is the medically appropriate course of treatment. A thorough evaluation prior to treatment also allows the physician to begin managing problems before they become significant.

The ideal candidate for lithotripsy typically has: (1) a renal or upper ureteral stone that is visible with X-ray, (2) a stone of at least 4 mm in a functioning kidney, (3) no urinary infection or controlled urinary infection, and (4) low risk for anesthesia-related problems.

The Food and Drug Administration lists the following conditions as contraindications for ESWL: (1) gallstones, (2) lower ureteral stones, (3) bladder stones, (4) when general or peridural anesthesia is inadvisable, (5) pregnancy, (6) presence of a cardiac pacemaker, (7) when patient anatomy does not permit radiologic focusing, (8) obstruction in the urinary tract distal to the stone, and (9) renal artery calcification.

Other relative medical contraindications are high risk of heart failure, pneumonia, low position of diaphragms, clotting abnormalities, aortic aneurysm, uncontrolled infection, and the presence of a stone in a kidney with little or no function. There are also non-medical contraindications that are dictated by the limitations of the lithotripter. The Dornier model is unable to accommodate patients who weigh more than 300 pounds or patients who are under 4 feet or over 6 feet 6 inches in height.

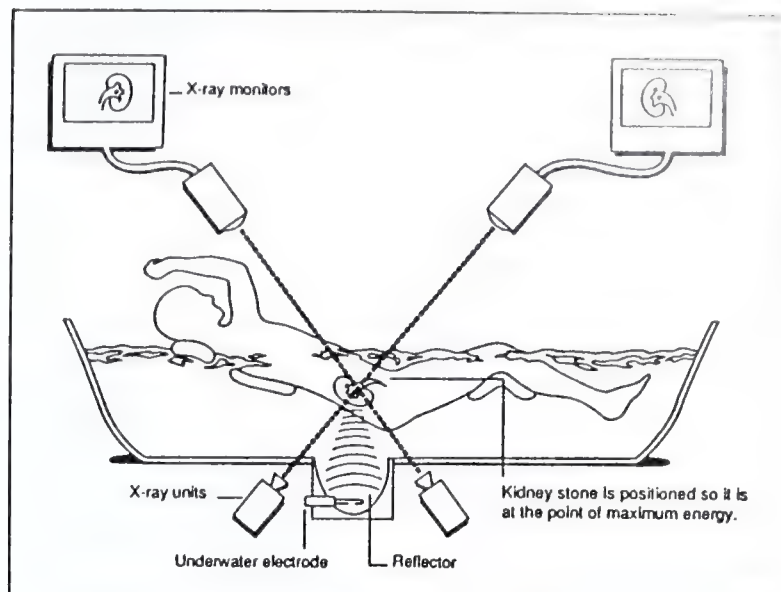
Follow-Up Care

The effectiveness of lithotripsy is influenced by the number, size, location, and density of stones. For most patients, passage of stone fragments begins during treatment and is relatively uneventful. Mild pain and fever, abdominal discomfort, post-anesthesia nausea and vomiting, and gross hematuria, which usually resolves itself in 24 to 48 hours, are the most common postoperative symptoms. These are easily managed with diet restrictions, antiemetics, and mild analgesics such as acetaminophen.

Although postoperative care is usually limited to management of these symptoms, close follow-up is critical since fragments may become impacted in the lower ureter and cause obstruction of the urinary tract. For this reason, postoperative X-ray and ultrasound studies are periodically ordered to check on the progress of fragment passage.

Steinstrasse

Post-ESWL accumulation of calculi fragments in the ureter is known as steinstrasse. Steinstrasse itself is not always an indication for intervention. In many cases, steinstrasse is asymptomatic and resolves itself. However, in 3 percent to 4 percent of patients, the fragments become impacted and cause intractable pain, obstruction, or urosepsis. In symptomatic patients, fragments are often so tightly packed that endoscopic removal carries the risk of ureteral perforation. Although steinstrasse is not preventable, insertion of double J stents or percutaneous debulking procedures prior to treatment have been found effective in helping to minimize it. Postoperatively, obstruction by stone fragments is managed by additional shock wave therapy or an endourological procedure such as stent insertion, ureteroscopy removal, or temporary percutaneous



nephrostomy. Open surgery is needed in approximately 1 percent of patients.

Results

Thousands of patients have been successfully treated with the Dornier lithotripter. Studies indicate that: (1) stone disintegration occurs in 98 percent to 99 percent of lithotripsy cases for renal calculi, (2) fragments are passed without incident in 75 percent to 80 percent of lithotripsy cases, and (3) more than 70 percent of lithotripsy patients are stone-free three months after treatment.

For most patients, lithotripsy is the treatment of choice because it is less painful, allows for quicker recovery, and reduces the risk of kidney damage. Most patients are able to resume normal activity a few days after treatment because ESWL is non-invasive. In addition, substantial economic savings are realized with ESWL because lower morbidity results in substantially less convalescence and lost work time.

Availability

Extracorporeal shock wave lithotripsy is available in Hawaii at the Kidney Stone Center of the Pacific. The center, a partnership of Kuakini Medical Development Corp., Queen's Health Technologies Inc., and Straub Imaging Services Inc., operates from facilities on the fourth floor of The Queen's Medical Center's Kamehameha Wing. Prospective lithotripsy patients should be evaluated by a urologist before being referred to the Kidney Stone Center.

REFERENCES

1. Chaussy C, Schmiedt E: Extracorporeal shock wave lithotripsy (ESWL) for kidney stones. *Urologic Radiology* 6:80-87, 1984.
2. Gillenwater JY, Jenkins AD: Shock-wave lithotripsy for the removal of kidney stones. *Virginia Medical* 112:182-83, 1985.
3. Newman RC, Bezirdjian L, Steinboeck G, Finlayson B: Complications of extracorporeal shock wave lithotripsy: prevention and treatment. *Seminars in Urology* IV(3):170-174, 1986.
4. Report of American Urological Association Ad Hoc Committee to Study the Safety and Clinical Efficacy of Current Technology of Percutaneous Lithotripsy and Non-Invasive Lithotripsy, May 1986.
5. Riehle RA: Extracorporeal shock wave lithotripsy of ureteral stones. *Seminars in Urology* IV(3): 175-82, 1986.

Instructions to Authors, Hawaii Medical Journal

Summary of Requirements

Type manuscript triple-spaced, including title page, abstract, text, acknowledgments, and references.

Each manuscript component should begin on a new page, in this sequence:

Title

Text

Acknowledgments

References

Tables: Camera-ready, complete with title and footnotes.

Legends for illustrations

Illustrations must be good quality, unmounted glossy prints usually 12.7 by 17.3 cm (5 by 7 inch) but no larger than 20.3 by 25.4 cm (8 by 10 inch).

Submission of Manuscripts

Mail two copies of the manuscript in a heavy paper envelope, enclosing the manuscript and figure in cardboard, if necessary, to prevent bending of photographs during mail handling. Place photographs in a separate, smaller, heavy paper envelope.

Manuscripts should be accompanied by a cover letter from the author who will be responsible for correspondence regarding the manuscript. The cover letter should contain a statement that the manuscript has been seen and approved by all authors. Include copies of any permissions needed to reproduce published material or to use illustrations of identifiable subjects. Mail to Editor, Hawaii Medical Journal, c/o Hawaii Medical Association, 320 Ward Ave., Suite 200, Honolulu, Hawaii 96814.

Preparation of Manuscript

Type manuscript on white bond paper, 20.3 by 26.7 cm or 21.6 by 27.9 cm (8 by 10 1/2 inch or 8 1/2 by 11 inch) with margins of at least 2.5 cm (1 inch). Begin each of the following sections on separate pages: Title Page, Acknowledgments, References, Tables and Legends. Number pages consecutively, beginning with the Title Page. Type the page number in the upper right-hand corner of each page.

Manuscripts will be reviewed for possible publication with the understanding that they are being submitted to one journal at a time and have not been published, simultaneously submitted, or already accepted for publication elsewhere. This does not preclude consideration of a manuscript that has been rejected by another journal or of a complete report that follows publication of preliminary findings elsewhere, usually in the form of an abstract. Copies of any possibly duplicative published material should be submitted with the manuscript that is being sent for consideration.

Title Page: The title page should contain (1) the title of the article, which should be concise but informative; (2) a short running head or footline of no more than 40 characters (count letters and spaces) placed at the top of the title page; (3) first name, middle initial, and last name of each author, with highest academic degree(s); (4) name of department(s) and institution(s) to which the work should be attributed; (5) disclaimers, if any; (6) name and address of author responsible for correspondence about the manuscript; (7) names and address of author to whom requests for reprints should be addressed, or statement that reprints will not be available from the author; (8) the source(s) of support in the form of grants or contributions.

Text: The text of observational and experimental articles is usually — but not necessarily — divided into sections with the heading: Introduction, Methods, Results, and Discussion. Long articles may need subheadings within some section to clarify their content, especially the Results and Discussion sections.

Abstract or Summary: The abstract or summary should be a condensation of the paper's essential qualities, and must be understandable without reference to the paper. Length should not exceed 300 words and

must not contain material not covered in the paper.

Introduction: Clearly state the purpose of the article. Summarize the rationale for the study or observation. Give only strictly pertinent references, and do not review the subject extensively.

Methods: Describe your selection of the observational or experimental subjects (patients or experimental animals, including controls) clearly. Identify the methods, apparatus (manufacturer's name and address in parenthesis), and procedures in sufficient detail to allow other workers to reproduce the results. Give references to established methods, including statistical methods; provide references and brief descriptions of methods that have been published but are not well-known; describe new or substantially modified methods, give reasons for using them, and evaluate their limitations.

Include numbers of observations and the statistical significance of the findings when appropriate. Detailed statistical analyses, mathematical derivations, and the like may sometimes be suitably presented in the form of one or more appendices.

Results: Present your results in logical sequence in the text, table, and illustrations. Do not repeat in the text all the data in the tables and/or illustrations. Emphasize or summarize only important observations.

Discussions: Emphasize the new and important aspects of the study and conclusions that follow from them. Do not repeat in detail data given in the Results section. Include in the Discussion the implications of the findings and their limitations and relate the observations to other relevant studies. Link the conclusions with the goals of the study but avoid unqualified statements and conclusions not completely supported by your data. Avoid claiming priority and alluding to work that has not been completed. State new hypotheses when warranted, but clearly label them as such.

Recommendations, when appropriate, may be included.

Acknowledgments: Acknowledge only persons who have made substantive contributions to the study. Authors are responsible for obtaining written permission from everyone acknowledged by name because readers may infer their endorsement of the data and conclusions.

References: Number references adopted by the U.S. National Library of Medicine and used in *Index Medicus*. The titles of journals should be abbreviated according to the style used in *Index Medicus*.

Tables: Must be submitted camera-ready (computer-generated are acceptable). Freehand or typewritten letters or numbers are not acceptable. Number tables consecutively and supply a brief title for each. Give each column a short or abbreviated heading. Place explanatory matter in footnotes, not in the heading. Explain in footnotes all nonstandard abbreviations that are used in each table. For footnotes, use the following symbols in this sequence: *, †, ‡, §, ¶, **, †† Identify statistical measures of variations such as SD and SFM.

Illustrations: Submit the required number of complete sets of figures. Figures should be professionally drawn and photographed; freehand or typewritten letters are unacceptable. Instead of original drawings, roentgenograms, and other materials, send sharp, glossy black-and-white photographic prints, usually 12.7 by 17.3 cm (5 by 7 inch) but no larger than 20.3 by 25.4 cm (8 by 10 inch). Letters, numbers, and symbols should be clear and even throughout, and of sufficient size that when reduced for publication each item will still be legible. Titles and detailed explanations belong in the legends for illustrations, not on the illustrations themselves.

Each figure should have a label pasted on its back indicating the number of the figure, the name of the authors, and the top of the figure. Do not write on the back of the figures or mount them on cardboard, or scratch or mar them using paper clips. Do not bend figures.

Legends for Illustrations: Type legends for illustrations double-spaced, starting on a separate page with arabic numerals corresponding to the illustrations. When symbols, arrows, numbers, or letters are used to identify parts of the illustrations, identify and explain each one clearly in the legend. Explain internal scale and identify method of staining in the photomicrographs.

**Facts about today's
corporate environment.**



Your survival depends on the financial direction you take today.

So you need a bank with the skill and commitment to help you manage your cash. One with a full array of advanced business services tailored to your needs.

First Interstate Bank.

While today some banks are cutting back services, we are not. So we can commit to helping you operate more efficiently now and in the future with a broad range of credit and non-credit products.

First Interstate products and services are backed by the unique strengths of the First Interstate system and are used by 70 of the Fortune 100. First Interstate has over 1,100 full-service banking offices in 18 states, and international banking offices in 22 foreign countries.

We can tailor products to your specific needs: wholesale lock box, CashLink™ controlled disbursement, comprehensive payroll systems and automated accounting and reporting services.

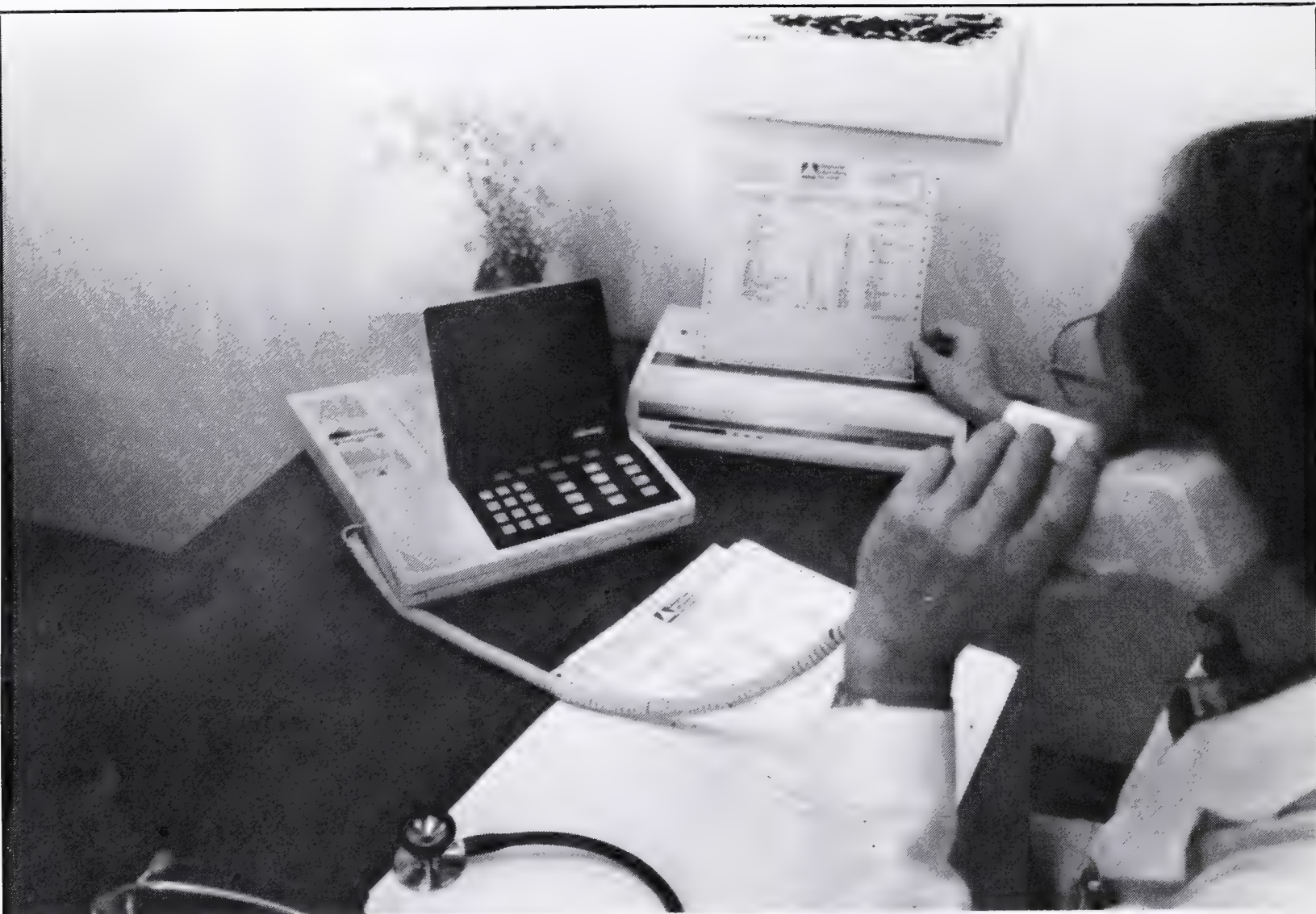
In addition, First Interstate provides innovative financing techniques for the short-term or long-

term, revolving lines, stand-by lines, inventory and equipment financing as well as commercial mortgage financing for office improvement or project development.

Get a clear financial direction from the single source for all your business banking needs. Call the Business Banking Group of First Interstate Bank of Hawaii at 525-6820 today.

 **First
Interstate
Bank**

Member FDIC



As Hawaii's own independent clinical laboratory,

Diagnostic Laboratory Services serves you and your patients with advanced computerized technologies for maximum reliability and efficiency. **DLS** provides a broad scope of high quality lab services at a reasonable cost. **DLS** offers physicians and hospitals the latest information systems to enhance their practices and benefit their patients.

Creative physicians today use innovative supporting services to the advantage of their patients and practices. With our skilled staff, state-of-the-art instrumentation, and centralized computer system, we can assist you in providing your patients better medical care.

Networking

DLS offers physicians and hospitals the opportunity to utilize LABNET, a new dimension in laboratory services: an on line computerized information system allowing you immediate access, 24 hours a day, to comprehensive clinical information while simultaneously protecting its security and confidentiality.

Centralized Computer System

DLS is computerized from the moment patient information and specimens are registered to the final delivery of results to your office by courier or LABNET. For the extra protection of your patients, our computer highlights all significant abnormal test results, alerting our Client Service Department to call your office.

Additional Services

- Automated Hematology
- Multi Channel Chemistry Analyzer
- Broad Range of In-House Esoteric Testing
- Disease Oriented Profiles
- Flexible Billing
- HMSA Assignment Accepted

Put us to the test.



**Diagnostic
Laboratory
Services INC.**

523-7061

Endourologic Treatment of Urinary Tract Stones

William J. Yarbrough, MD*
Walter S. Strode, MD**

Percutaneous renal surgery and ureteroreoscopy have almost supplanted traditional open surgery in the last two or three years. This paper will review our experience with these new techniques in the treatment of urinary calculi and describe briefly the newest and least invasive method available (ESWL).

In recent years, endourologic techniques such as percutaneous renal surgery and ureterorenoscopy have revolutionized the field of urology by eliminating the need for many open surgical procedures. Our experience with endourology began in December, 1982, and encompassed 148 percutaneous nephrolithotomy and 46 ureteroscopic procedures at the time of the study. (The majority of the procedures were for symptomatic renal or ureteral calculi.) This paper will review our experience with endourologic techniques in the treatment of urinary calculi, and describe how we expect the management of urolithiasis to be affected by the availability of extracorporeal shock wave lithotripsy (ESWL).

Percutaneous Nephrolithotomy (PNL)

Percutaneous nephrolithotomy involves the establishment of a tract that provides access to the renal pelvis and permits passage of a nephroscope and other instruments used in stone removal procedures. At our facility, cystoscopy is performed in conjunction with the percutaneous nephrolithotomy to permit insertion of a ureteropelvic junction (UPJ) occlusion balloon catheter. The catheter is used to administer the contrast material needed for collection system opacification.

After the patient is placed under general endotracheal anesthesia and the cystoscopy is completed, the patient is placed prone on chest rolls, and the calyx or infundibulum which offers the best access to the stone is chosen fluoroscopically. A 1.5 cm skin incision is made in the posterolateral flank below the 12th rib, and the chosen puncture location is entered with an 18-gauge sheath needle. Once the needle is appropriately placed, a 0.038 inch, movable core, teflon-coated, J-guide wire is placed through the sheath into the collecting system. Successively larger fascial dilators are then passed over the guide wire to enlarge the tract. When the tract is adequately dilated, a sheath is inserted and the nephroscope is introduced to allow visualization of the renal collecting system and the stone.

The stone removal method is determined by the size and composition of the stone. For small stones, removal is typically achieved using specially designed forceps (graspers). Renal calculi too large to be removed intact (usually those over 1.3 cm) are usually fragmented by ultrasonic lithotripsy and removed. (This is a safe and effective technique that can be used for all but the most dense calculi.) Some stones, particularly those composed of uric acid and calcium oxalate monohydrate, may require the use of electrohydraulic lithotripsy for initial fragmentation.

After the procedure is complete, a nephrostomy tube is left in the pelvis and a 5 Fr safety catheter is left in place in the ureter. The tube and catheter are removed when bleeding stops and the nephrostogram shows no residual stone fragments, no extravasation, and free flow of contrast to the bladder. Although most patients are discharged from the hospital by the third post-operative day, the tube and catheter are usually not removed until five to seven days after surgery.

Perioperative IV antibiotic coverage is provided, usually with a first generation cephalosporin in uninfected cases. Preoperative infected cases are treated for 24 hours or more with sensitivity specific drugs before surgery.

Study Data

Demographic Data. Patient age ranged from 18 to 82 with a mean of 47 years (Table 1). There were 103 males and 45 females, a 2.3:1 ratio. Forty percent of the patients were Caucasian, 20% were Japanese, and 10% were Filipino (Table 2). During the same period, the ethnic composition of Straub Hospital admissions was 32.2% Caucasian, 19.4% Japanese, and 6.2% Filipino. Filipinos, therefore, demonstrated a higher incidence of stone disease. (In Hawaii, the incidence of uric acid stones is generally higher than the incidence in most areas of the Mainland. Hawaii's higher-than-average incidence has been attributed to the large number of Orientals in our island population. Our clinical impression is that Filipinos, more than any other ethnic group, are prone to uric acid stone formation.)

Chemical Composition of Stones. Chemical analysis of removed stones was completed for 75% of our patients (Table 3). Of those analyzed, 10.2% were found to be uric acid and ammonium acid urate stones. Almost all of these were from Filipino and Chinese patients. Fifty-six percent of stones analyzed were calcium oxalate or calcium phosphate, and 7.4% were associated with infection (struvite). There were no cystine stones found in our patient population.

Location and Number of Stones. Forty-nine percent of stones treated were in the left kidney or ureter and 49% were in the

Accepted for publication November 1986

*Chief, Urology Department,
Straub Clinic & Hospital

**Attending Physician, Urology Department, Straub
Clinic & Hospital

right kidney or ureter (Table 4). Seventy-two percent were single-stone cases, including 12.2% for staghorn calculi. The remaining 27% were patients with multiple stones.

Sixty-three percent of the stones were truly renal — either pelvic, calyceal, or a combination thereof, including staghorns and partial staghorns (Table 5). Thirty-one percent of stones presented as upper ureteral or UPJ stones and were displaced when possible into the kidney for percutaneous removal. Those stones that could not be dislodged from the ureter by manipulation from below were removed by percutaneous methods alone. In general, we found that upper ureteral stones treated in situ with percutaneous techniques alone were often difficult, and early in our experience accounted for several open operations. A small number (5%) of stones removed percutaneously presented in the distal two-thirds of the ureter and were displaced either cystoscopically or ureteroscopically back into the kidney for successful removal.

Effectiveness. Despite the relatively high proportion of patients with multiple stones and staghorn stones, 79% of our patients were rendered free of their targeted stones in one stage. Fourteen percent required two procedures, 6% required three procedures (see Table 6), and one patient with a very dense and complete staghorn calculus required five stages of percutaneous work. Furthermore, in 84% of the cases the patient was being treated for his or her first stone.

Complications. Complications in our percutaneous renal surgery experience are as noted in Table 7. The majority of the pelvic perforations shown occurred early in our percutaneous experience and during the tract dilation procedure. These perforations responded well to simple nephrostomy drainage for one to three days. Four of the six failures to remove targeted stones represented patients who received ultrasonic lithotripsy for large stones and had residual fragments. All transfused patients had staghorn calculi requiring prolonged percutaneous procedures.

The average length of stay for our 148 patients was five days, a figure that reflects the longer hospitalization required by staghorn patients (Table 8). We believe the average stone patient who has only one procedure can leave the hospital by the third postoperative day with nephrostomy tube in place, and return for the nephrostogram and tube removal several days later.

Discussion

Our experience with these patients confirmed the viability of percutaneous nephrolithotomy and its suitability for most stone patients requiring surgical intervention.

The cost-effectiveness of percutaneous nephrolithotomy is primarily attributed to the reduction in postoperative morbidity that characterizes all endourologic techniques. In our experience, the average cost, excluding insurance compensation, was \$4,900 for percutaneous nephrolithotomy and \$5,000 for open surgery. However, the typical morbidity for percutaneous removal was one week as opposed to at least four weeks for open pyelolithotomy.

Ureteroscopy (URS)

At our facility, ureteroscopy for removal of ureteral calculi is performed under general endotracheal anesthesia with fluoroscopic control. The patient is placed in English stirrups at the end of the fluoroscopy table. Cystoscopy with a 21 Fr or 23.5 Fr cystoscope is performed and the ureteral orifice of the affected side located. A 5 Fr, open-ended angiocatheter is placed in the orifice and a low-pressure ureterogram is made with dilute contrast if indicated. Five to 10 ml of diluted, aqueous lidocaine jelly is often slowly injected into the lower ureter for lubri-

TABLE 1
PNL

Age range	18-82
Mean	47.236
Standard deviation	14.121
Sex: Male	103
Sex: Female	45
Ratio 2.3:1	

TABLE 2
PNL

Race	N	%
Caucasian	60	40.5
Japanese	29	19.6
Filipino	15	10.1
Chinese	7	4.7
Hawaiian	2	1.4
Korean	2	1.4
Part-Hawaiian	13	9.3
Other	20	13.0

TABLE 3
PNL

Composition	N	%
CaOx	76	51.4
CaPhos	7	4.7
Struvite	11	7.4
Uric acid	14	9.5
Amm Acid Urate	1	.7
Brushite	1	.7
Unknown	38	25.7

TABLE 4
PNL

Type of Stone	N	%
Single left	42	28.4
Single right	46	31.1
Multiple left	22	14.9
Multiple right	17	11.5
Multiple left/right	1	.7
Staghorn left	9	6.1
Staghorn right	9	6.1
Not available	2	1.4

cation, after which a floppy tip, straight 0.035-inch guide wire is passed up the ureter to the stone. The guide wire is passed to the kidney if it can be done without displacing the stone.

The distal (intramural) ureter is then dilated by one of several means — balloon catheter, flexible dilators, or bougies. (We prefer the high-pressure, Olbert-type balloon which is about 4 cm long and 5 or 6 mm in diameter.) After dilation, an 11.5 Fr, rigid ureteroscope is passed, under vision, along the wire to the stone. The stone is visualized and removal is achieved with a stone basket.

Ultrasonic lithotripsy is used if needed. After the stone is disintegrated and removed, ureteroscopy is repeated at a higher point in the urinary tract to rule out residual fragments or ureteral injury. When this procedure is complete, a double J, 6 Fr, silicone catheter is placed over the wire between the kidney and the bladder. The procedure is terminated with a Foley catheter in place. The catheter is removed when the patient is discharged the next day. For the typical patient, stent removal is done in the office within a week.

Study Data

Forty-six ureteroscopic procedures performed in 1984 and 1985 were included in this study. The majority of these procedures were for stone removal. During 1986, an additional 36 cases were done, but have not been included in this study.

Patients ranged in age from 21 to 83 years, with a mean of 52 years (Table 9). Males outnumbered females nearly three to one. By accounting for 22% of the cases, Filipinos were once again disproportionately represented in the study (Table 10).

Although stone composition was not recorded for one-third of these patients, over one-half of the stones analyzed were calcium oxalate (Table 11).

In contrast to the percutaneous cases, over 90% of ureteroscopic stone removals were for single stones. As expected, a large number (over 70%) were located in the distal one-third of the ureter, 10% were in the middle third, and 13% were in the upper third (Table 13).

Seventeen percent of these ureteroscopy patients underwent ultrasonic lithotripsy as well. (Ultrasonic lithotripsy can be safely done in the ureter. In many cases, basketed stones trapped in a basket that bind in the ureter cannot be safely removed without ultrasonic fragmentation. This is one of the distinct advantages of ureteroscopy over blind cystoscopy — stones can be reduced in size under visual control and safely slipped distally through the dilated intramural ureter.)

Stone Removal Problems. We were a bit surprised to see that our data showed that stone removal was unsuccessful on the first ureteroscopic try for approximately 22% of the patients (Table 14). Careful study revealed that several patients could not be adequately dilated on the first attempt. In two of these patients, leaving a 6 Fr or 8 Fr stent in for two or three days and repeating the procedure was effective in allowing the ureteroscope to be passed to the stone. Six other patients had their stones displaced into their kidney during the ureteroscopic procedure. In these cases, the stone was removed from the kidney by percutaneous means. Therefore, only two of 46 ureteral stone cases could not be managed endourologically.

Infection was not a major problem in these cases. As seen in Table 15, the majority of patients presented with sterile urine. Nevertheless, perioperative IV antibiotic coverage was routinely employed.

Cost-effectiveness of the Procedure. Ureteroscopic stone removal is cost-effective. In our study, the length of stay in the hospital ranged from one to eight days, with a mean of 3.8 days (Tables 16 and 17). Stays in the hospital beyond the first

TABLE 5 PNL		
Location	N	%
Renal	92	62.0
Upper ureter	49	33.6
Mid ureter	3	2.1
Distal ureter	2	1.4
Not available	2	1.4

TABLE 6 PNL		
Number of Procedures	N	%
1	117	79.0
2	21	14.2
3	9	6.1
5	1	.7

TABLE 7 PNL		
Complications	N	%
Pelvic perforation	11	7.4
Infection	9	6.1
Failure to remove targeted stone	6	4.1
Bleeding requiring transfusion	3	2.0

TABLE 8 PNL Length of Stay (days)	
Number of cases	146
Range	1-26
Mean	5.021
Standard deviation	3.999

TABLE 9 URS Age range 28-83 Mean 51.913 Standard deviation 15.605		
Sex	N	%
Male	34	73.9
Female	12	26.1
Ratio: 2.8-1		

TABLE 10
URS

Race	N	%
Caucasian	20	43.5
Filipino	10	21.7
Japanese	7	15.2
Chinese	1	2.2
Korean	1	2.2
Part-Hawaiian	3	6.4
Other	4	8.8

TABLE 11
URS

Composition	N	%
CaOx	26	56.5
Uric acid	3	6.5
Struvite	1	2.2
MgCaPhosCarb	1	2.2
Unknown	15	32.6

TABLE 12
URS

Type	N	%
Single left	27	58.7
Single right	15	32.6
Multiple left	2	4.3
Multiple right	1	2.2
Bilateral	1	2.2

TABLE 13
URS

Location	N	%
Distal 1/3	34	73.9
Middle 1/3	4	8.7
Upper 1/3	6	13.0
Urethra	1	2.2
Right upper/left distal	1	2.2

TABLE 14
URS

Complications	N	%
Failure to remove targeted stone	10	21.7
Ureteral perforation	5	10.9
Ureteral stricture	4	8.7

TABLE 15
URS

Infection	N	%
No	37	80.4
Yes	7	15.2
Unknown	2	4.4

TABLE 16
URS
Length of Hospital Stay (days)

	N	%
1	2	4.3
2	4	8.7
3	12	26.1
4	16	34.8
5	9	19.6
6	2	4.3
8	1	2.2

TABLE 17
URS

Mean Length of Stay (days)	
Number of cases	46
Range	1-8
Mean	3.804
Standard deviation	1.310

postoperative day were usually due to the placement and use of an open-ended, externally draining stent, a procedure requiring nursing care and inpatient management.

For the past four months, we have inserted a double J, internal ureteral stent after performing ureteroscopy. This permits patients to leave the hospital the day after their stone is removed and return for stent removal in the office a few days later. By eliminating the need for long hospitalization, ureteroscopic stone removal results in direct savings when compared with an open ureterolithotomy that calls for an average hospital stay of five to seven days. Post-hospital morbidity is also less for ureteroscopy than it is for open surgery. As a result,

indirect savings are also generated.

Extracorporeal Shock Wave Lithotripsy

Extracorporeal shock wave lithotripsy (ESWL) is a relatively new, non-invasive technique that uses shock waves to disintegrate renal and proximal ureteral calculi. We expect to see more than 80% of the surgically active, upper urinary tract stones being handled by ESWL in the near future. We also anticipate that lithotripsy, in conjunction with an endourologic procedure, will be appropriate for nearly all of the remaining renal and upper ureteral stones.

Retrospective Review of Cases. Retrospective review of the

endourology cases in this study was conducted to estimate the percentage of cases that could have been effectively treated with ESWL. It is our best estimate that lithotripsy would have been appropriate for nearly 97% of the percutaneous nephrolithotomy cases and 26% of the ureteroscopic cases.

Conclusions

Endourologic treatment of urinary tract stones has quickly become the treatment of choice. In comparison with traditional open surgery, these procedures are highly effective and result in much lower morbidity. Consequently, they are well-received by patients.

Our review of 148 percutaneous nephrolithotomies and 46 ureteroscopies done at Straub Hospital in the past three to four years reveals successful removal of targeted stones in a high percentage of cases. The problems encountered in these cases were minimal.

The availability of ESWL in Honolulu, in conjunction with available endourologic methods, will assure the capable, well-trained, and experienced urologist of a greater than 95% success rate in the treatment of urinary tract stones. A new era in urology has truly arrived.

BIBLIOGRAPHY

1. Goodwin WE, Casey WC, and Woolf W: Percutaneous Trocar (Needle) Nephrostomy in Hydronephrosis. *J Amer Med Assoc.* 157:891, 1955.
2. Lyon ES, Kyker JS, Schoenberg HW: Transurethral Ureteroscopy in Women. A Ready Addition to Urologic Armamentarium. *J Urol* 119: pp. 35-36, 1978.
3. Chaussy C, Schmiedt E, Jocham O, et al: "Extracorporeal Shock Wave Lithotripsy: New Aspects in The Treatment of Kidney Stone Disease." Basel, Switzerland, S Karger, 1982.

. . . panels prove their success

Medical Malpractice in the State of Hawaii (1979 - 1984)

Jean Kadooka Mardfin*

In 1976 the Hawaii Legislature created the Medical Claim Conciliation Panel to screen medical malpractice claims. The following article describes the findings of a statistical study of the claims filed between January 1979 through December 1984.

This study indicated that the existence of these panels helped to reduce the number of malpractice claims that were ultimately filed in the state courts.

Introduction

According to a recent study funded by the Hawaii Department of Commerce and Consumer Affairs, Hawaii's 10-year-old Medical Claim Conciliation Panel (MCCP) program continues to fulfill its original legislative intent. The study of final out-

comes for 615 claims filed from January 1979 through December 1984 showed fairly speedy resolution of claims and a statistically significant reduction in the number of claims that proceeded to lawsuits.

Hawaii's Medical Claim Conciliation Panel (MCCP) was established in 1976 by the state Legislature to encourage early settlement of medical malpractice disputes and to weed out claims lacking merit. This law required every medical malpractice complaint against a health care provider (as defined by law) to be filed with the MCCP before a suit could be filed in court.

A panel of two attorneys (one of whom presides as chairperson) and one physician issues its advisory opinion of a finding of respondents' liability or non-liability after an informal hearing and review of testimony and medical records. The panel may also indicate its dollar recommendation for economic and non-economic damages but is not required to do so. The panel is then disbanded; a new panel is created to hear every claim.

The statute provides that if a hearing and panel decision are not reached within 18 months of filing, the statute of limitations, which is tolled during this period, begins running again and the claimant may file suit in an appropriate state court without having gone through the screening process. The study

Accepted for publication November 1986

* Free-lance Legal Researcher, Attorney

CAN YOU T ONE WHO WA



TRUST SOME- ONE WHO WANTS IT ALL?



Have a look in the mirror and evaluate your second self; not the one who made your success, but the one who manages it.

Sure, you want it all. Complete responsibility. But if you give 100% effort to your business or profession, what's left for minding your fortune?

You can trust brokers and real estate advisors for their specialties; however, with a portfolio of \$150,000 or more, you need to consider balanced asset management.

That's right, we want it all to manage. With unbiased objectivity.

Hawaiian Trust performs. For fiscal '85-'86, the stocks of our Contract Equity Fund at 30.6%* tracked with Standard & Poor's 31.7%. The bonds of our Contract Fixed Income Fund outperformed Salomon Brothers'; 27.9%* to 27.7%. In commercial real estate, we're relied on, daily, for everything from tough collections to a fresh coat of paint.

The full service of Hawaii's oldest, largest and most productive trust and investment company is within easy reach. Send us the attached reply card or phone 525-7567 on Oahu, or on Maui 871-2633.



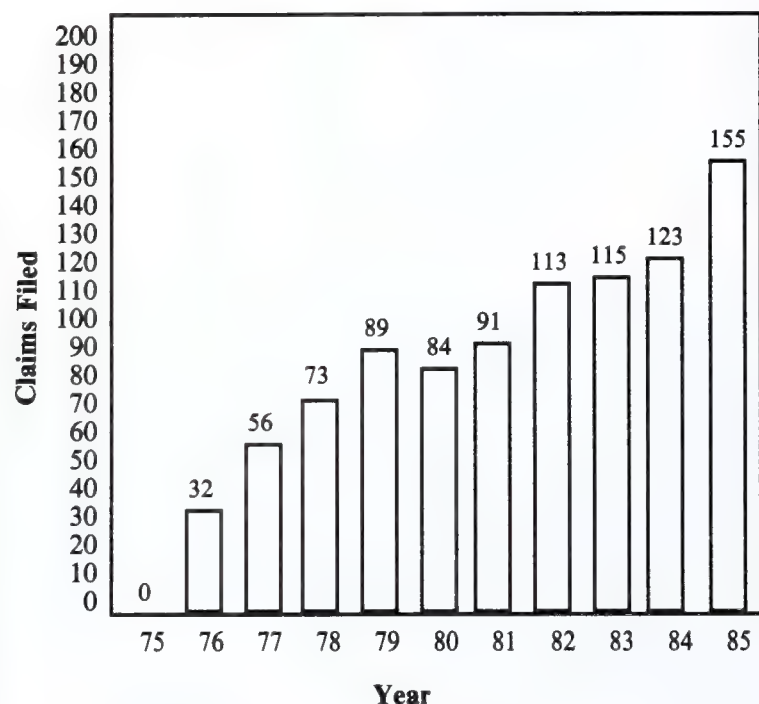
Hawaiian Trust Company, Ltd.

A Trust and Investment Company of

h Bancorp Hawaii

*Annualized rates of return for Hawaiian Trust's investment funds for qualified plans from October 1985 through September 1986. Yields will vary with changing market conditions. Past performance is not necessarily an indication of future results.

FIGURE 1
MCCP Claims Filed



also looked at this aspect of the law to determine whether participants are trying to circumvent the purposes of the MCCP through tactical delays of more than 18 months. A year-by-year comparison since 1979 of the number of claims thus affected showed that for 1979, 1980, 1981, about 4.5% of claims filed during the year reached the 18-month limit without a hearing. The figures for 1982 and 1983 did show increases of 9.7 % and 17.4%, respectively. The 1984 figures were not complete, with 32 claims still to be heard, so no clear trend can yet be demonstrated although there may be a tendency toward more delays.

Because of the advisory nature of the panel's opinion, the claimant can choose to ignore its finding and file a suit shortly after the opinion is rendered. Moreover, the panel's opinion is not admissible in court. The motivations for filing suit were not studied in the recent study, but the final outcomes of 615 claims filed between 1979 through 1984 were analyzed to determine whether the panels were effectively reducing the court workload of medical malpractice cases.

Methology

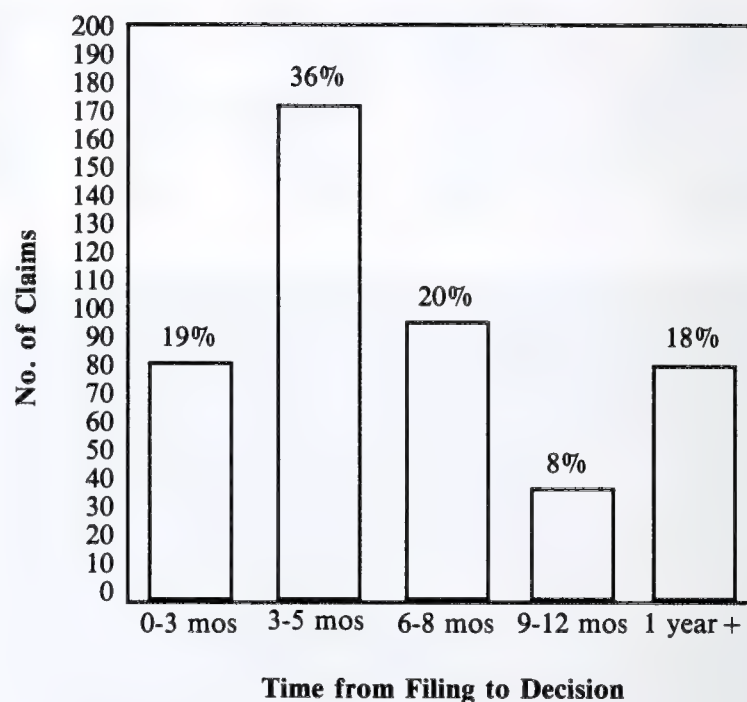
Each medical claim submitted to the MCCP is numbered consecutively during the calendar year. A file is developed for each claimant containing the complaint, answer, hospital records, and physician records. A separate summary sheet is also maintained for each claim. These summary sheets are used to collect up to 12 kinds of information for each medical tort claim to derive calculations for elapsed time, outcome of the claim, and the effect of the panel decision on the frequency of lawsuits.

Findings

Claims filed with the MCCP have been increasing annually, except for a slight drop in 1980. Figure 1 shows the number of claims filed each year since 1976, up to Dec. 31, 1985.

Of the 615 claims filed between 1979 through 1984, 453 claims

FIGURE 2
Distribution of Decision Time



(74% of all claims filed) went on to be heard by a panel. The balance, 162 claims, (26% of total claims filed) were either withdrawn or dismissed, closed for failure to be heard within 18 months, settled before hearing, or were still pending as of Aug. 31, 1985. Claims that failed to be heard within 18 months accounted for 7.1% of the total number of claims filed (44 claims).

Liability Determination

Of all 453 claims heard during the six-year period, respondents were found liable in 109 claims (24%). On the other hand, respondents were found not liable in 328 claims (72%). The remaining 16 claims (4%) were heard but no findings were indicated by the panel. This occasionally happens when the claimant suddenly withdraws his/her claim after the hearing but before an opinion has been prepared by the panel.

Altogether, 120 lawsuits were filed in state courts from all claims filed from 1979 through 1984. The 120 lawsuits represent 19.5% of all claims filed and 26.4% of claims heard. These percentages were slightly higher than the finding of Shintani, where 17.8% of all claims filed and 25.8% of all claims heard resulted in lawsuits. (See: T Shintani and HW Goebert Jr: The Success of Hawaii's Medical Claim Conciliation Panel. *Hawaii Medical Journal* 40-41-47, 1981, which describes the panels' first three fiscal years, July 1976 through June 1979.)

Where liability was found by a panel, about 34% (37 out of 109) pursued their claim by filing a lawsuit. For all claims in which no liability was found by a panel, 24% filed a lawsuit (78 out of 328). A finding of no liability appeared to reduce the probability of a lawsuit by 10 percentage points or by 30% (10% divided by 34%). Another way to view this is, if claimants in which the finding was no liability had sued with the frequency of claimants in which there was a finding of liability, then there would have been 33 more lawsuits filed. This reduction in probability was found to be statistically significant in the chi-

square test discussed in a later section.

Lawsuits that resulted from 116 medical malpractice claims from 1979 through 1983 were traced to final dispositions (i.e. whether settlement occurred before trial, whether the case went to trial, etc.). Data from 1984 were omitted from this segment of the study. The tracking effort required a check of the court records and a telephone call or a letter to attorneys to determine the final disposition of each court case. Disposition of the lawsuits is discussed later.

After a panel opinion has been rendered, a large number of claimants appear to have taken "no further action" on their claim [274 claimants out of 453 claims heard (61%)]. Where the respondent was found liable, it is not known what further action was taken by 53 claimants. There are several possibilities: negotiations over the final settlement figures might be ongoing; some claimants might be considering a lawsuit since the finding of the panel was in their favor; some respondents might not agree to the payment of any settlement amount, which could delay final payment or would force the claimant to sue.

Where the respondent was found not liable, it is not known what further action was taken for 221 claims. This means that no definitive conclusions can be drawn about these claims until more time has passed in order to allow the claimants to decide to sue, to settle, or to drop the claim altogether.

Insurers may regard this number of 274 claims as representing potential lawsuits, and until settled or closed without payment probably carry them as an estimated "incurred cost" in insurance reserves. However, realistically, since most of the lawsuits have been filed within a few months of the panel's decision, it is quite unlikely that more than a handful will be pursued in the courts.

Effect of Decision on Outcome

A chi-square test was conducted on the outcomes of MCCP claims to determine whether a panel's finding of liability or no liability had any bearing on the claimant's subsequent decision to take further action (such as to settle for some amount of money or to sue in court) or to drop the claim.

For 437 cases (omitting claims where "no opinion" was rendered by a panel) the χ^2 (chi square) statistic equaled 33.08 with 3 degrees of freedom, which implied a probability of less than 1% that the MCCP finding had no effect on subsequent outcome. Specifically, a finding of liability increased the probability both of getting a paid settlement and the probability of filing a lawsuit, while reducing the probability of the claimant taking no further action. Similarly a finding of no liability increased the probability of the claimant taking no further action. This indicated that the MCCP did in fact make some difference in the job of screening out claims without merit or convincing the claimant to drop the claim.

Elapsed Time Analysis

By law, each claim filed with the MCCP must be scheduled for hearing within 30 days after the last date for filing a response from the respondent. In addition, a decision must be reached by a panel within 18 months of the filing date. This requirement assured resolution of a claim within a year and a half of filing.

For this segment of the study, one open claim from 1983 and all data from 1984 were omitted. An analysis of the elapsed time for a typical claim filed during these years yielded the following information: The mean time from date of filing to date of hearing (if held) was 156 days with a standard deviation of 123 days; the mean time from date of filing to date of completion was 229 days with a standard deviation of 181 days.

Another way to get a picture of these data is to imagine that if a claim were filed on Jan. 1, the mean time for the case to be heard would be on June 5. The mean time of completion, which means a decision was rendered by a panel would be on Aug. 17 of the same year, a little more than 7½ months after filing.

A calculation of the mean elapsed time is of interest because it gives the average length of time for the typical case to be heard and to have a decision rendered by a panel. A review of the dispersal of elapsed times for the observed claims indicated that, hypothetically, if all claims were filed Jan. 1, two-thirds of the claims would have been concluded between Feb. 17 of the same year and Feb. 14 of the next year.

A frequency distribution for claims resolved by months was also derived from the analysis of elapsed time. Of 491 claims filed, 19% of claims were resolved in less than three months, 36% in three to five months, 20% in six to eight months, 8% in nine months to one year, and 18% took longer than a year to resolve (see Figure 2). In other words, for the 491 claims filed from 1979 through 1983, 55% were resolved within six months of filing and 75% of 491 claims were resolved in less than nine months since date of filing.

Lawsuits

Regardless of the opinion of liability or no liability expressed by a panel, the claimant is free to pursue his/her medical malpractice claim in the appropriate court in the State of Hawaii. Some 116 lawsuits resulting from claims filed from 1979 through 1983 were traced to their ultimate disposition by contacting attorneys involved in each case (again 1984 data were omitted because of the large number of open claims). The response rate was 94%. Lawsuits of "unknown" disposition accounted for only 6% of the total investigated (seven out of 116). The results were classified according to whether the panel found liability, no liability, or did not hear a claim.

Nearly half of the cases (47%) were settled out of court (51 out of 109) and many cases were still pending. There were 15 cases in which judgment or summary judgment for the defendant and judgment for the plaintiff occurred. Of these 15 cases, two cases were adjudicated for the plaintiff and 13 for the defendant.

Conclusion

Although acting as an advisory panel, the MCCP performs a screening function for medical malpractice claims in the State of Hawaii. Based on statistical analysis of the speed of resolution of claims and the effect of the panel's finding on the decision whether to sue or not, indications are that the panels do reduce the workload on the court system and decrease costs to participants. The study found that 55% of all claims heard by a panel are resolved by the end of five months of filing and a typical claim if filed on Jan. 1, is heard by June 5 and has a decision rendered by a panel by Aug. 17 of the same year.

It was also found that a panel's finding of liability or no liability has a statistically significant effect on the claimants' decision to file a lawsuit, or to drop the claim, and on a respondent's willingness to settle for some amount of money.

Lawsuits filed during the five-year period, 1979 through 1984, accounted for 20% of all claims. Investigation into the disposition of 116 of these 120 lawsuits showed that while 6% of the lawsuits could not be traced to final outcome, 47% were settled out of court and 27% were still pending, 13% were dismissed or withdrawn, and 14% (15 cases) reached judgment for plaintiff or defendant. Of these last 15 cases, only two cases were ultimately decided for the plaintiff and 13 were decided for the defendant.

Cost-Containment and Communication with Patients

Harry K. Davis, MD*

As new patterns in the delivery of health care services emphasize procedures and technology, the time spent communicating with patients is decreasing. Some of the more obvious reasons for this change are outlined in the following article:

1—The demand by the physician's employer or by himself or herself to be more monetarily productive to meet increasing health care delivery costs (i.e., supplies, inflation, insurance, etc.).

2—By replacing adequate communication time with the patient with time spent obtaining technological and procedural data in order to proceed with diagnosis and treatment.

3—The pressure to do a wide spectrum of procedures and tests in order to avoid possible "negligence" and suffer subsequent litigation.

4—The "role model" whom the young physician emulates uses protocol medicine and technology in diagnosis and treatment, rather than patient communication.

5—Patient demands for "procedures" frequently block the dialogue between the patient and the doctor.

6—Third-party demands for more complete documentation of medical records as a result of the litigious climate in which we practice medicine.

Sennholz¹ has estimated that \$15 billion to \$30 billion could be saved annually in health care delivery costs by the reduction in the over-utilization of laboratory and X-ray facilities. Although this over-utilization is accentuated because of the pressures of litigation, adequate patient communication could further reduce this.

Medical students were taught in the 1940s that in 90% to 95% of the cases, an accurate diagnosis could be made by doing a complete history and physical examination.

Now, according to C. Burns Roehrig, MD, president of The American Society of Internal Medicine, this figure has been reduced to about 75%. Physicians in family medicine, internal medicine, pediatrics, and psychiatry, who emphasize history taking and fewer procedures believe communication enhances the personal relationships, treatment compliance, disease prevention programs, and that it reduces hospital stays. Improved communication, then, provides reassurance, support, and knowledge so that the patient can better deal with the unknown of his illness.

Even third-party payors (e.g. Blue Shield of Massachusetts) agreed that allowances for office visits should be raised 25%, while reducing price hikes for procedures by 14%. In Kansas, Blue Shield cut the surgical high-tech procedural fees physicians charged by 25%, but cognitive fees were reduced by only 2%.

As technology has improved, physicians cannot help but be impressed by the "positive test" as providing a definite answer to a diagnostic dilemma. This is reassuring and comforting both to the physician and the patient. However, a "negative test" is of a lesser diagnostic significance. Should then, another expensive, often painful, diagnostic procedure be ordered? Or, would it be better to communicate with the patient, obtaining enough clues, so that the differential diagnosis could be narrowed down to a more precise one?

Does every case of dyspepsia need an upper GI/GB series? Do all headaches need CAT scans in order to rule out brain tumors? Or could not a few appropriate questions establish that 85% of all headaches are not serious and are due to transient causes? Do all hospital admissions need chest films, EKGs, batteries of chemistries, or can they be ordered only as indicated?

One can expect communication with a patient to be more difficult in those with chronic illnesses, multiple illnesses, or in compensation cases, where litigation is involved, where patients give histories of accident proneness with or without multiple litigation; where the patient does doctor-shopping, and lastly, in cases where the patient complains that "no one helps." The diagnosis of so-called personality disorders and even psychiatric illness may turn out to be simply impairments in communication.

How many times does the experienced clinician obtain a history from a patient, while fully realizing that the patient was actually omitting material pertinent to his illness or was omitting the reason why he came to see the doctor in the first place? If the patient failed to communicate his problem and the doctor failed to ask the right questions, therapy could never be successful. Physician acceptance of the patient with all his problems, taking into account his ethnicity, social status, and behavior are all important for communication. Trust between physician and patient is enhanced in the context of the initial referral, the physician's employer, and his reputation, etc. Without the above ingredients, several interviews may be necessary for the physician to establish adequate rapport and to convey to the patient that "he understands," "he knows" and can help with the timing and type of intervention, both diagnostically and therapeutically, that are necessary.

Historically, patient-doctor verbal and non-verbal com-

Accepted for publication November 1986

* Department of Psychiatry,
Straub Clinic & Hospital

munication has been termed the art of medicine. Intervention into the medical care delivery system by numerous external forces such as HMOs, PPOs, and IPOs, WC, etc., plus the changing legal processes, ease of litigation and the temptation inherent in high award/rewards, society's litigious climate, and the increasing use of technology and procedures all have distanced the physician from the patient.

The medical specialties of family medicine, psychiatry, pediatrics, and internal medicine emphasize the art of communication, and many hours are spent training the physician to get a complete history and to understand the necessity to follow up on communication cues. Particularly, symptoms are to be understood in the context of the whole person rather than fragmented symptoms from various organ systems. One can see this often in histories taken by the non-primary care medical specialties.

Communication is a two-way process. The physician must communicate to the patient that he is "with" him to help, to diagnose and treat, and to do everything he can to solve the problem and/or alleviate his discomfort. The patient then is allowed adequate time to divulge his problem; this creates an atmosphere of understanding and acceptance through spoken and non-spoken cues. Obtaining a medical history is among the first of the clinical skills taught to the student of medicine and is sharpened with each professional contact thereafter.

Much has been written concerning how to obtain a medical

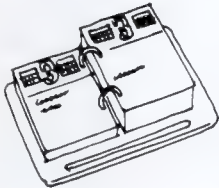
history but the pressures of time, availability, and accuracy of diagnostic procedures, and the emphasis on technology and specialization of medical education, has detracted from the physician's skill in establishing meaningful communication with his patient. History-taking is like a detective following clues to a crime; the listening process is continuous deductive reasoning carefully correlating cognitive clues with emotional and behavioral responses. This can be illustrated by correlating how the patient describes his symptoms with his associated behavior during the initial history-taking session.

Summary

Adequate communication with patients becomes essential for diagnosis and treatment, and unquestionably leads to significant cost-containment in the delivery of health care services. By increasing professional communication and using more humanistic approaches, while at the same time de-emphasizing technology and "procedures," the physician can help the patient's pocketbook as much as he can offer therapy to the patient's body and mind.

REFERENCES

1. Sennholz H: Patients Enticed by Entitlement Trap, Private Practice, February 1986, pp. 23-27.
2. Kaplan et al.: Comprehensive Textbook of Psychiatry, Vol III, 1980, pp 3350.



**Continuing
Medical
Education**

CALENDAR OF ACCREDITED EVENTS—CATEGORY 1

Accredited Programs of CME allow one unit of AMA credit for each hour of instruction excluding all "breaks." Some programs also are accredited for AAFP prescribed credit.

LOCAL ACCREDITED PROGRAMS ONGOING

For a complete list of ongoing programs, please refer to the March 1986 issue of the HAWAII MEDICAL JOURNAL. Further information is available through the individual institutions or through the HMA's CME Department.

SPECIAL EVENTS

All special events should be confirmed with the CME program sponsors, as cancellations are not necessarily reported to the HAWAII MEDICAL JOURNAL.

Jan. 7-14, 1987	A Conference on Love and Sexuality and on Women and Men as Loving Allies, Dr. Joyce Jennings, president, HPI, P.O. Box 226, Claymont, Del. 19703, (302) 475-0693. Location: Turtle Bay Hilton, Oahu.
Jan. 9-11, 1987	Intensive Training in Guided Imagery: Mental Images for Health and Growth, American Imagery Institute Medical College of Wisconsin, (414) 781-4045. Location: Hyatt Regency, Honolulu.
Jan. 15-22, 1987	Refresher Courses in Anesthesiology, The Institute for Post Graduate Education, (616) 948-8377. Location: Royal Lahaina, Maui, and Sheraton Coconut Beach, Kauai.
Jan. 19-24, 1987	ACOG CME, American College of Obstetricians and Gynecologists, 600 Maryland Ave., S.W., Washington D.C., 20024, (202) 638-5577, Dr. Harrison C. Visscher. Location: Kauai.
Jan. 24-31, 1987	Pediatric Emergencies, California Medical Association/Scripps Memorial Hospital, 354 Santa Fe Dr., Encinitas, Calif. 92024. Location: Kona.
Jan. 25-28, 1987	West Coast Retinal Study Club Annual Meeting, West Coast Retinal Study Club, Don Griffith, MD, 239 Wakea St., Kahului, Hawaii 96732, (808) 877-3984. Location: Mauna Kea Hotel, Big Island.

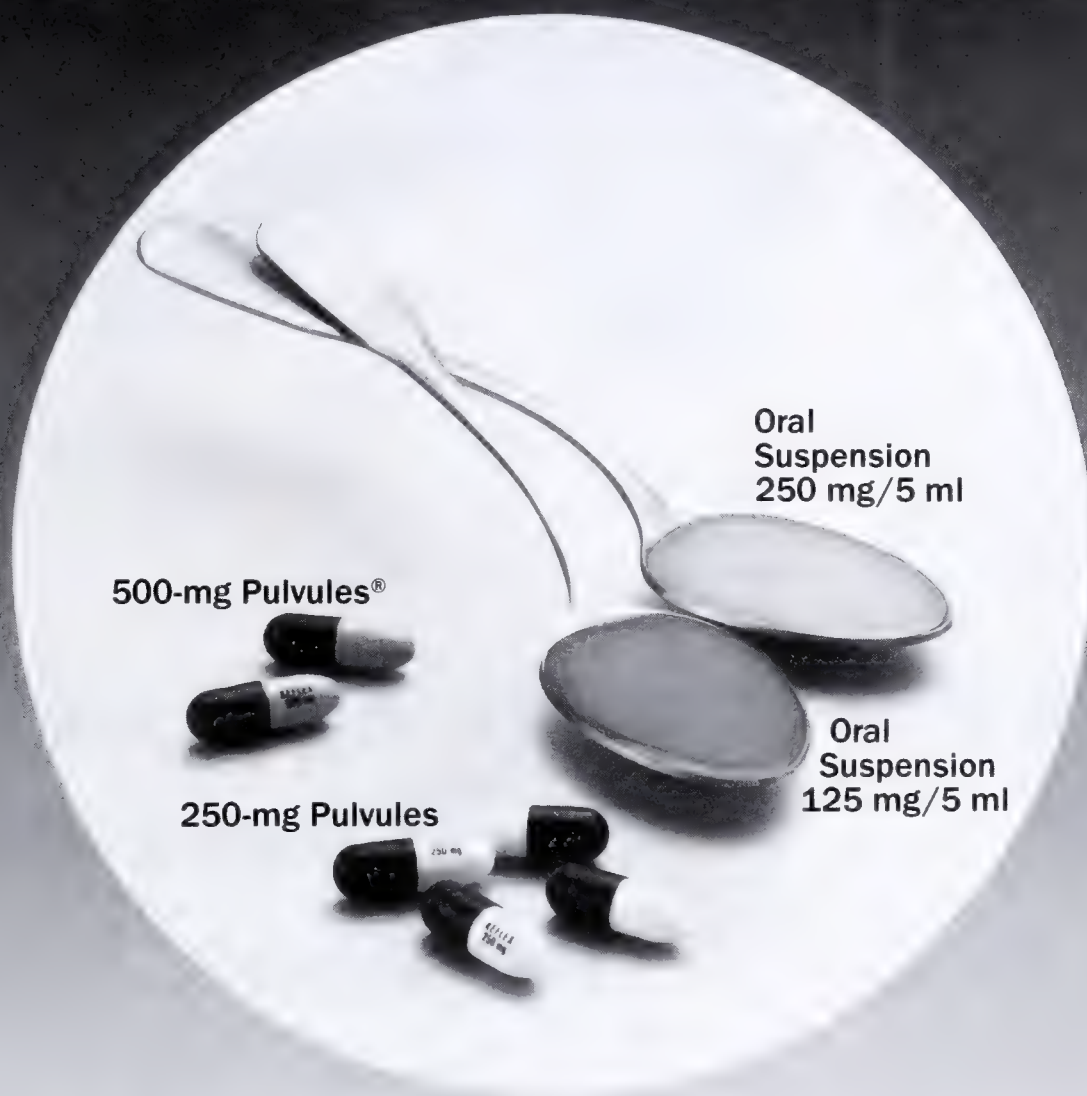
CME

(Continued from page 25)

Jan. 26-30, 1987	Fifth Annual Hawaii Conference on Gastrointestinal and Hepatic Disease, Honolulu Medical Group Research and Education Foundation, Gary Glober, MD, 1380 Lusitana St., Honolulu 96813. Location: Hyatt Regency, Maui.
Jan. 27-31, 1987	Focused Seminars for Physicians, Administrators, and Trustees, Estes Park Institute, P.O. Box 400, Englewood, Colo. 80151. Location: Maui.
Jan. 31-Feb. 7, 1987	Infectious Disease in General Medical and Pediatric Practice, University of Colorado School of Medicine, (303) 394-5195. Location: Maui Inter-Continental.
Feb. 1-7, 1987	Eighth Annual Royal Hawaiian Eye Meeting, Hawaiian Eye Foundation, John Corboy, MD, 606 Kilani Ave., Wahiawa, Hawaii 96786-1993 (808) 621-8448. Location: Kona Surf, Big Island.
Feb. 7-14 1987	Office Pediatrics for Primary Care Physicians, University of Colorado School of Medicine, (303) 394-5195. Location: Kona Surf, Big Island.
Feb. 7-14, 1987	Third Annual Tropical Retreat on Complex Coronary Angioplasty, Geoffrey Hartzler, MD, Mid America Heart Institute, St. Luke's Hospital, Kansas City, Mo. (816) 932-2220. Location: Turtle Bay Hilton, Oahu.
Feb. 7-14, 1987	Perinatal Medicine, University of Southern California School of Medicine, (213) 224-7051. Location: Royal Lahaina Hotel, Maui.
Feb. 9-13 1987	Second Annual Cardiovascular Conference, American College of Cardiology, 9111 Old Georgetown Rd., Bethesda, Md. 20814. Location: Kona.
Feb. 10-14, 1987	Emergency Medicine: A Critical Appraisal Series Two All New Course, American College of Emergency Physicians, California and Florida Chapters of ACEP, (800) 243-5976. Location: Maui Inter-Continental.
Feb. 10-17, 1987	Clinical Update in Medicine and Surgery, Boston University School of Medicine, (617) 638-4605. Location: Maui.
Feb. 12-16, 1987	The Science in Family Practice, Hawaii Academy of Family Physicians BC Chapter, College of Family Physicians, (604) 736-5551, ext. 228.
Feb. 14-21, 1987	Magnetic Resonance Imaging, Vanderbilt University School of Medicine and the Department of Radiology and Radiological Sciences, CCC-5326 Medical Center N, Nashville, Tenn. 37232. Location: Maui.
Feb. 14-21, 1987	MRI, Vanderbilt University School of Medicine, (615) 322-4030. Location: Kapalua Bay, Maui.

Feb. 14-21, 1987	Clinical and Laboratory Hematology: Current Issues, Mayo Clinic/Mayo Foundation,(507) 284-2085. Location: Maui Marriott, Maui.
Feb. 17-21, 1987	Current Problems in Internal Medicine, William L. Nietz, Division of Education, Mayo Clinic, Rochester, Minn. 55905, (507) 284-2085. Location: Maui Marriott.
Feb. 17-24, 1987	Clinical Update in Medicine and Surgery, Boston University School of Medicine, (617) 638-4605. Location: Maui.
Feb. 18-21, 1987	Island Symposium on Cardiac Pacing, Cardiovascular Institute for Continuing Medical Education and Research, (512) 690-1522. Location: Maui Inter-Continental.
Feb. 19-21, 1987	Management of Infectious Disease, University of Michigan Medical School, (313) 763-1400. Location: Kahala Hilton, Honolulu.
Feb. 21-28, 1987	Radiology for Emergency and Primary Care Physicians, American Institute of Post Graduate Education, Scripps Memorial Hospital, (619) 454-3212. Location: Royal Lahaina, Maui.
Feb. 22-26, 1987	Western Section AUA: Annual Meeting, American Urological Association Inc., Box 25147, Houston, Texas 77265. Location: Kona.
Feb. 23-25, 1987	Hawaiian Ophthalmological Midwinter Seminar, HOS 87, 3578 Pahoia Ave., Honolulu 96816-2265. Location: Honolulu.
Feb. 26-27, 1987	Hawaii Regional Meeting, American College of Physicians, (800) 523-1546, ext. 3611. Location: Hawaiian Regent Hotel.
March 5-7, 1987	Advances in Pediatrics II: Neonatology, Nephrology, Cardiology, Infectious Diseases and Sports Medicine, American Academy of Pediatrics, (800) 433-9016, ext. 7884. Location: Waiohai, Kauai.
March 7-14, 1987	Pulmonary Medicine, University of Southern California School of Medicine, (213) 224-7051. Location: Royal Lahaina, Maui.
March 7-14, 1987	Topics in Internal Medicine for Primary Care Physicians, University of Colorado School of Medicine,(303) 394-5195. Location: Kauai Sheraton.
March 7-14, 1987	American College of Osteopathic Obstetricians and Gynecologists Annual Meeting, American College of Osteopathic Obstetricians and Gynecologists, (313) 332-6360. Location: Maui.
March 8-13, 1987	Hawaii 87: Critical Issues in Primary Care, Pacific Institute of Continuing Medical Education, Valerie Murray, P.O. Box 1059, Koloa, Hawaii 96756, (808) 742-7476. Location: Waiohai Hotel, Kauai.

Easy To Take



Keflex[®]
cephalexin

Additional information
available to the profession
on request.



420113

Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46285
Mfd. by Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630



**The best doctors get sued.
We protect you.
We know how.**

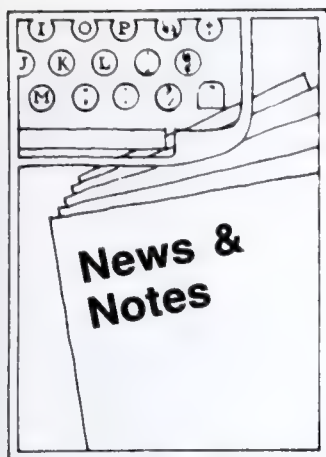
Let us tell you how we do it.



Medical Insurance Exchange of California
Professional Liability Exclusively

6250 Claremont Avenue, Oakland, California 94618-1324

Call MIEC's Honolulu Claims Office, 545-7231, or call toll-free 800-227-4527



HENRY YOKOYAMA, MD

Life In These Parts

Facial plastic surgeon Bruce Chrisman has a dream . . . He wants to grow the Stradivarius of ipu heke — hula gourds . . . Three years ago, Bruce started collecting gourd seeds . . . Friends gave him seeds from the Molokai boondocks, from Ka'u on the Big Island, from Kohala and from Napoopoo at Kealahakua Bay . . . He built about 25 terraces in his backyard along Kalaniana'ole Hwy. and began growing them about a year and a half ago . . . "Today his backyard looks like a Greek arbor after an earthquake" with gourds, not grapes, the size of watermelons hanging from the vines . . . (From "Out of his gourd . . . come sweet bongos" by Bob Kraus). Once he got the hang of growing the gourds, he began to experiment with another lost art, decorating them like the dyed gourds at Bishop Museum . . . Bruce experimented with chemicals, dyes and Molokai red dirt and finally produced a quality decorated gourd, but he won't tell how he did it until he gets a patent . . . "I want to make this a protected ethnic art and give it to the Hawaiian people . . ."

We received the following item: "Cheer Up: Birds have bills, too, but they keep singing . . ."

In the morning bumper-to-bumper traffic, we passed the Hawaii Rent All, an equipment rental store at the corner of Beretania and McCully that brightened our mood with its witty ad: "Hoist a few with our auto jacks."

A Honolulu geriatric psychiatrist speaking on Alzheimer's Disease reassured his Kailua-Kona audience that "just because you're getting older and forgetful doesn't necessarily mean you have Alzheimer's . . . It's when you start forgetting things, but forget you forgot . . . that's when you're in trouble . . ."

Philip Hellreich, president of the Hawaii Federation of Physicians and Dentists warned in a letter to the editor: "Without meaningful tort reform, every citizen in our state will eventually suffer . . . The insurance premiums for some of the most highly skilled physicians will double in the next year or two . . . George Mason (Pacific Business News 10/21) stated that 'Hawaii is probably the highest risk state in the nation . . . because of the legal climate in Hawaii.' Forty-four other states have enacted some sort of remedial legislation . . .

Our legislators are entrusted with safeguarding the health and welfare of the citizens of our state . . . We hope that they don't shirk this responsibility."

Ken Kern, president, Hawaii Chapter National Sudden Infant Death Syndrome Foundation took exception to the information in the Advertiser's Medical Briefs column that a New York doctor after investigating 26 cases of SIDS stated that the majority of deaths were from accidental asphyxiation or parental abuse. Ken states, "This man's opinion is contrary to that of physicians and researchers who have seriously studied thousands of cases of SIDS over many years. Research has found that SIDS is NOT caused by accidental asphyxiation, smothering, parental abuse, or any of the other cases suggested . . . Such statements do a disservice to the already grieving parents, causing them to feel that they are at fault when, in fact, their baby's death was unpreventable . . ."

The citizen lobbying group Common Cause issued the following list of spending re: tort reform by registered lobbyists (between Dec. 16 and June 15): Hawaii Academy of Plaintiffs Attorneys: \$57,380; Hawaii Insurers Council: \$21,127; National Federation of Independent Businesses: \$20,035; Hawaii Business League: \$15,733; Hawaii Medical Association: \$8,237 . . .

When the state hospital system's Argonaut insurance coverage lapsed May 31, the state decided to self-insure . . . Medical Director Edwin Montell of Hilo Hospital resigned in July to protest the situation. "We don't feel we can rely on the state's promises to defend doctors, nurses, and other hospital workers against malpractice charges . . ." (The only company bidding for state hospital coverage sought annual premium of \$2.5 million as compared to Argonaut's premium of \$300,000 to \$400,000. The asking premium would have been 2½ times what the state actually paid out in claims so the state didn't feel that made much sense . . .) Edwin said that his primary reason for resigning was his concern about the legal exposure of hospital workers other than physicians who don't carry personal malpractice coverage.

"Ayurveda" is a medical science practiced for 5,000 years . . . Robert Svoboda started out in Western medicine in the early '70s before embarking on a more enlightened path

in India. He is the first and only Westerner to graduate from an Ayurvedic College in India. Robert says, "The idea is to do what you want to do — but not to get sick . . . Indulge wisely so you can indulge continuously . . . While Western medicine focuses on the ailment, Ayurveda concentrates on the whole person . . ." In India, there are 250,000 Ayurvedic doctors as compared to 30,000 MDs . . . Robert feels that Western medicine and Ayurveda could benefit each other . . .

The Feds have started paying for a limited number of heart transplants for Medicare beneficiaries since this fall . . . Hawaii's Medicaid program plans to follow suit, but Earl Motooka, Medicaid administrator, warns that "catastrophic" costs may force the state to eventually discontinue coverage . . . Medicaid has been covering kidney and bone marrow transplants, but Earl says, "If we do encroach into the heart transplant area, it can mean big bucks to the taxpayer and if we were to approach the Legislature for more money to add to the existing \$200 million Medicaid budget, they're going to hit the roof . . ."

Robert Weinmann, neurologist from San Jose, Calif., and vice president of the Union of American Physicians and Dentists, spoke at a local meeting of the Hawaii Federation of Physicians and Dentists . . . "Doctors should communicate with their own patients through newsletters and contribute more to public debate on medical issues . . . The Medicaid Fraud Control Unit is trampling on civil rights of doctors . . . They are a group of Keystone Kops . . . If you look into a Medicaid fraud unit, you will find featherbedding, ineptitude, and favoritism . . . Doctors should shake off their reticence about getting publicity and contribute more to the press, to public debate . . . Doctors should go public with their support of tort reform . . . By their silence, doctors have allowed others to make what should be medical decisions . . . For example, a physician will prescribe 15 physical therapy sessions for a patient, but the medical insurance company will only pay for 12 . . . You don't fight it, so patient and insurer take that as an admission . . . You have compromised your professional ability . . ."

(Continued to page 30)

Physicians Speak Up . . .

When our good friend Tom Frissell speaks, we listen . . . And Tom had this to say about drugs and alcohol: "The cost to this country in attempting to prevent drug use is appalling . . . First there is the money involved in drug enforcement . . . Then there is the cost to the community by addicts being forced into crime — stealing, etc. — to pay for their drug habit . . . The Washington administration states that international terrorists are financing their actions by participating in the drug trade . . . Complete legalization of drug use would immediately decrease the amount of squandered money by untold billions and cut off all source of funds for terrorists because the price of any of these drugs would be minimal on a free market . . . All the 18th Amendment did was to make crime more lucrative and cause many people who were abstemious to try alcohol. The same economics and morals apply to other drugs. Free country?" (Ed: Not bad logic for a die-hard Republican . . .)

Calling A Spade A Spade

John Withers of Kahului wrote a lengthy open letter to Sen. Ben Cayetano in the Maui News (from which we took the liberty of extracting): "In the Maui News issue of Sunday, June 29, the article on your address to the Maui County Bar Association left me far from speechless. You are reported to have said that the lawyers are being unfairly blamed for the insurance crisis when the real culprits are the insurance companies. To me, it appears that the kettle is calling the pot black . . .

The legal profession is trying to place all the blame on the skyrocketing liability payments onto the backs of the insurance companies, yet it seems reasonable, in our country of free enterprise, that if the insurance companies were reaping these great profits, which the attorneys claim they are doing, that many insurance companies would be rushing to Hawaii and to states such as Florida and West Virginia where liability coverage is no longer available . . . You state that it is a misconception that the Legislature is controlled by lawyers because only 13 of the 76 senators and representatives are attorneys . . . It has been the attorneys who have 'stonewalled' all attempts at court reform . . . Your statements that it would be 'pointless' for Gov. Ariyoshi to call the special session only points out the control that the lawyers have at the state level.

I for one will not vote for you for lieutenant governor nor for any attorney running for either the Senate or House . . . We do not need wolves making the laws for the chicken coop." (Ed: Curses! Foiled again!)

HMO vs. Fee-for-Service

(Excerpts from Star-Bulletin writer Lucy Young's superb, objective reporting on a delicate matter:)

HMOs may be thriving, but there is a silent

majority of physicians who favor the traditional fee-for-service method of care and payment . . . "Those doctors are banding together to preserve, promote, and protect the fee-for-service concept," according to Phil McNamee, president of the HCMS. About 125 physicians have started a Hawaii chapter of the California-based fledgling Independent Doctors of America . . . The local group is chaired by Drs. H.H. Chun and James Lumeng . . . Phil, commenting on the business aspect of HMOs, added, "I think the quality of medical care could be compromised by external forces."

William Dung, president of Kaiser plan and Kaiser hospitals says, "Analysts are predicting that within the next 10 years, half of the medical care in the country will be provided by HMOs . . . There are predictions that the HMO numbers will be consolidated to eight or 10 multistate firms . . . It is managed health care . . . the melding of business and medical care in one package . . . Obviously we are threats to doctors who provide fee-for-service."

Franklin Young speaking against HMOs said, "There is no incentive or encouragement for doctors to join such groups, 'except fear.' The fear that if you don't join this plan that's going to be so rosy, all the patients will buy the plan and you'll be isolated . . . I've got the feeling that most of the 'silent majority' want to retain the fee-for-service method."

Phil McNamee says that 80 percent of Hawaii's 2,000 doctors are fee-for-service practitioners, about 15 percent are with Kaiser, with the remaining 5 percent in smaller HMOs. Phil stressed that the coalition is not trying to stop the formation of HMOs, PPOs, or other forms of organized health care . . . "We are not 'anti-HMO' . . . we just want to promote our point of view . . . We think competition is healthy . . . The rules of business — supply and demand — are in play in the medical marketplace . . . One of the other things we stress is that we want to preserve quality — that's our main thrust . . . People can get fooled into joining something that is cheaper, thinking that they can get equal quality . . . Not always so . . . You get what you pay for."

Bill Dung strongly rebuked criticism that HMOs tend to sacrifice efficiency for economics . . . "Good HMOs do not cut corners and sacrifice quality of care . . . One of the pluses of prepaid group insurance is that we are able to avoid unnecessary uses of health care . . . The healthier I keep them, the more money I make . . ."

"HMO membership nationwide has more than doubled within the last five years, from 9.5 million patients in 1980 to 21.5 million in 1985. HMO growth is prodded by a federal act that supplies grants and loans to offset the operating deficits of federally qualified HMOs and the federal push has caused the proliferation, with emphasis on economy and efficiency . . . Ambulatory care is replacing hospitalization, and stress is being placed on 'well-

ness,' health regimens, and disease prevention . . . HMO hospitalization rates average roughly half that of traditional insurers . . . Phil McNamee says, "In some way, in order for them (HMOs) to survive, they must limit or ration their services . . . It could be at a disadvantage to HMO patients . . ." Bill Dung says, "We don't underserve; we can't . . . Our main concern is high-quality care . . . There's no economic incentive to minimize services. We don't tell the doctor, "If you withhold care, we'll give you more money." (Ed. As Shakespeare so aptly soliloquizes, "To be or not to be . . . That is the question.")

Entrepreneurs

Kauai Medical Group started Island Care six years ago and sold the plan to Mainland-based Healthcare USA, which promised to infuse capital into Hawaii to assist the HMOs expansion. Clarence Funaki, president of KMG announced in July that KMG's 35 physicians will join Honolulu Medical Group and QMC to start a new Health Maintenance Organization called Best Care . . .

Visiting Physicians

Seventy-year-old James Yamazaki was here to attend the International Congress of Pediatrics . . . James is a clinical pediatrician at UCLA and was physician in charge for the atomic Bomb Casualty Commission in Nagasaki from 1949 to 1951 and continues to monitor the health of people who survived the U.S. atomic bomb blast there in August 1945. He also monitors several hundred Marshallese who were exposed to radioactive fallout from the 1954 Bikini Atoll test . . . James makes the point: "The younger you are, the more sensitive you are to radiation . . . In the event of a nuclear war, there will be no next generation . . . It's the future generations that will be knocked out . . . Fetuses and children exposed to even low-level radiation would likely suffer arrested brain development . . . Cancer occurs earlier and at higher rates . . . Leukemia occurs at a rate 50 times higher . . . Incidence of cancer is much greater for children under 10 than those 10 to 19 years old . . ." When he learned that one nuclear submarine carries more explosive punch than was expended in all of World War II, James said, "Somebody's got to come up with a better answer . . . It's insanity."

The consensus among three top pediatricians attending the International Congress of Pediatrics in Waikiki in July was that emotional and behavioral troubles, not germs or infectious diseases, will be the biggest health problems faced by children of the 21st century . . . Robert Haggerty, professor of pediatrics at Cornell and past president of the Academy of Pediatrics said, "More attention must be paid to the interaction of behavior, environment, and biology . . . These are the keys to

(Continued on page 33)

REAL ESTATE OPPORTUNITIES

ELEGANCE and CLASS



Kahala Beach \$425,000

The "RIGHT ADDRESS". Luxury two bedroom/two bath condominium residence. Over 1200 Sq. Ft. of living area (LH) You deserve the "BEST"!

Call today: Fusako Grant (RA) 373-4618



KAHALA HALE, INC.
4747 Kilauea Avenue, Suite 212
Honolulu, Hawaii 96816
(808) 735-7888



POLYNESIAN COMPOUND

Over 8 structures on huge 26,830 sq. ft. lot with additional accretion. 90 ft. of WATER FRONTAGE. Very private, quiet, tropical area-totally unique. Enormous party lanai by Pool. Game room. A must see! Seller financing.

\$1,200,000 MLS 28725

CHRISTINE MORGAN (R) 373-9581

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

Conley Dew...of Course.



Stunning Grandeur

Large, dramatic Waialae Iki home with ocean and Diamond Head views. Gourmet kitchen with top of the line appliances. Specially woven carpets surrounded by exquisite marble. Large master bedroom suite with ceramic tiled shower/sauna. Over 1,000 sq. ft. of lanais. 4 bdrm., 3.5 baths.

Call **Mickey Patterson (RA) 373-9633** or
Yumi Laney (R) 524-2844.

Shown by Appointment

Hawaii Kai.....Lower Mariners Ridge. 3 or 4 bdrm, pool, spa in gazebo.....\$229,000 (L)
Nuuanu.....Upper valley. 3 bdrm, 2.5 bath, forest/stream views.....\$590,000 (FS)
Waialae.....Lower Waialae Nui. Split level, 3 bdrm, 2 bath, ocean view.....\$235,000 (L)
Kapiolani.....Royal Iolani. 1, 2, and 3 bdrm units available priced from.....\$130,000 (L)

CONLEY DEW

333 Queen St. • Suite 710 • Honolulu, HI 96813
A Real Estate Corporation

(808) 524-2844

LOCATION LOCATION LOCATION

With Honolulu's traffic woes getting steadily worse (and absolutely no solution even on the drawing boards), we invite you to consider the convenience of these two new listings. Both are fee simple, and in excellent close-in neighborhoods.

"Old Manoa"

a 3 bedroom, 2 bath 1-story home with formal dining room and beautiful gardens, close to Punahou School. The same owner-occupant for many years — and how it shows!

\$425,000.

Dowsett Highlands

2 bedroom, 2 bath main house with fireplace and a separate cottage. Sweeping views of mountains, and green Oahu Country Club fairways, to downtown Honolulu.

\$395,000.



Aina Haina Shopping Centre, Suite 126
820 W. Hind Drive, Honolulu, HI 96821 • (808) 373-9869

REAL ESTATE OPPORTUNITIES

KOKO KAI



An opportunity to establish your estate in this prestigious and most desirable residential area. A 4 bedroom, 4 bath spacious home for the executive who is looking for family comfort and gracious entertaining. Family room cantilevers over the large pool with arched terrace and the upstairs master suite opens to a large deck. A fireplace and wet bar add to the many amenities \$650,000 (L).

Vi Dolman (CRB) 373-4883

dolman
associates &
REALTORS
since 1957
531-6488

PRIVATE WONDERLAND!

WALK TO BEAUTIFUL KAILUA BEACH from this enchanting home — ideal for a couple, or retireds. A sparkling swimming pool with gazebo — a spacious lanai for entertaining — a large fee simple, completely enclosed yard. Charming two bedroom home with fireplace. \$235,000.
Glenn Bean (RA) 262-8722

TROPICAL ENCHANTMENT!

HAIKU PLANTATIONS
an estate property with glorious foliage - a large, level yard with stream adjacent and a feeling of Old Hawaii. Great big home with family room, enclosed lanai, formal dining room, two fireplaces, and separate sun room with spa, wet bar. Lease. \$350,000

Anna Boyd (R) 254-3959

WADE
LTD., REALTORS

25 KANEHOE BAY DRIVE
KAILUA, HAWAII 96734
Telephone 254-3521

MALAEKAHANA BEACH RENTAL



Rent a luxurious 6 bedroom 4-bath home at Malaekahana Bay. This exquisite estate is one of the most beautiful country rentals on the North Shore and is perfect for a two-family vacation. The property can sleep up to 16 people and includes a car, paddle tennis court and outdoor spa overlooking the ocean. Call for brochure: \$250 a day

Nancy Batten (R) 395-4565

HILL & CO.

specialists in fine residential properties

HONOLULU
373-9844

ANYONE FOR the MOTT-SMITH LANILOA?



Tennis is just one of the reasons people who live here wouldn't want to be anywhere else. One-bedroom with a view \$130,000 (L)
Two-bedroom de luxe penthouse, 2 baths, 2 parking \$300,000 (L)

Ask about FEE availability.

Spencer/Sewell Realty, Inc.

975 Kapiolani Blvd.

(808) 537-5511

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY

PALOLO VALLEY



"Land in Search of a Use"

13.1 acre parcel* with approximately 5.5 acres zoned for residential use and the balance in conservation. Quiet, private location. Diamond Head/Mountain view. Utilities available. Fee Simple. (24561) Asking \$780,000.

*Arrows indicate approximate boundaries.

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

GOOD CONDOMINIUM BUYS

MOUNTAIN TERRACE \$267,500
Super luxury decorator model. 1,644 sq. ft. Corner unit. Enjoy the quiet & solitude of this prestigious bldg. Ocean views from every room. New pool, rec. deck. Easily shown. You will be impressed.

OCEANFRONT AT WAIKIKI SHORES..... \$198,000
Two bedroom corner unit with unobstructed ocean views. Excellent rental income. Owner can carry long term agreement. Recently upgraded.

CANTERBURY PLACE \$189,000
Famous "D" corner unit. A one bedroom unit with 5 rooms and nearly 1200 sq. ft. Two lanai's, spa, heated pool, sauna. Excellent management. Terms.

Duffy Ryan LTD.
922-4622 • 395-6524
2222 Kalakaua Ave., Suite 713, Honolulu, Hawaii 96815

BEACH FRONTS



ON OAHU'S NORTH SHORE

Make us an offer on these excellent Beach Front properties. We will negotiate.

CUSTOM EXECUTIVE HOME 4 bdms, 2½ baths, cathedral ceilings, gourmet kitchen, teak paneling, separate office & more.
DUPLEX 6 bdms, 2 baths sandy beach front, great for hui. Perfect rental, live in one rent the other.

Call for a brochure

Marianne
Abrigo, Properties

P.O. Box 867, Haleiwa, Hawaii 96712 637-3511

WAIKIKI SHORES "THIS VIEW CAN BE YOURS"



You may not want to leave the comfort of this furnished 2 bedroom Penthouse to go to the beach just outside your door... but it is there when you want it! Leasehold. Co-op. \$295,000

Peggy Stock (R) 373-4346

STARK
REALTY
(808) 944-8744

DOWSETT POINT: In-Town Hideaway!

Charming 1 bed., 1 bath w/TENNIS COURTS! 10% down O.K. \$107,000 is super bargain! Great for young executive!

THE TOWNHOUSE: Adults Please!

Spacious 2 bed., 1 bath 1042 gross sq. ft. for \$85,000! Perfect for the theatre/Art hounds! Hop to Academy/NBC! Pool/covered parking. VA/FHA Approved. 5% down FHA available. Makiki.

PROSPECT TOWER: Makiki

Ocean view 2 bed., 2 bath 910 sq. ft. Adults only w/mostly owner occupants and 10% down. \$99,500 only. Quiet convenient location. Down FNMA O.K. Must sell in 1986!

VILLAGE MALUHIA: Starters.

2 bed., 1 bath OCEAN VIEW Units. VA/FHA Approved. 5% FHA O.K. #807 — \$78,000. #903 — \$79,999 \$76,000. Full modern appliances and luxurious amenities. Secured. Makiki.

LAKEVIEW ROYAL: Salt-Lake.

3 bed., 2 bath 945 sq. ft. Pool, parking. WALK TO SALT LAKE SHOPPING. \$100,000 is a BARGAIN! 10% down FNMA O.K.

KINGS GATE #1801: Mid-Executive.

Luxurious 2 bed., 2 bath Corner unit w/CITY/MTN VIEWS. Modern appliances incl. microwave. Luxury amenities. \$119,000 is super buy. VA/FHA APPROVED. means LOW DOWN!

Call CHU LAN or JOHN SHUBERT (R) FOR SHOWINGS

SHUBERT PROPERTIES INC. 538-3500

1188 Bishop Street, Suite 2801 • Honolulu, Hawaii 96813



NEWS & NOTES

(Continued from page 30)

dealing with injuries, suicide, and homicide, the three leading causes of death among children in the U.S. today . . . Pediatricians must work more closely with urban planners, architects, and politicians in the future . . ." Noboru Kobayashi, director of Japan's National Children's Medical Research Center in Tokyo agrees that pediatrics has done much to improve the biological lot of children worldwide, but much remains to be done to develop holistic and comprehensive approaches to children's health . . . Robert Aldrich of University of Washington says, "U.S. cities have been designed exclusively by and for adults, and children and teenagers have been neglected . . ." In Seattle, the children were first polled on their feelings about the city and the poll showed that the best place for children was the Seattle Center, site of the 1964 World's Fair. So children were brought into the planning for renovation of the center. A children's advisory board of kids between 11 and 15 has been actively involved in deciding issues such as curfew, city budget, and parks policy and expansion . . .

Elected, Appointed, & Honored . . .

Internist and gastroenterologist Stanley S. Shimoda was elected to Fellowship by the American College of Physicians . . .

The Radiology Group Inc., incorporated in 1978 by six physicians, was one of four small local firms nominated for the SBA's Administrator's Award for Excellence . . . The group was acknowledged for superior quality work on federal contracts . . .

Jerald Takesono was one of two representatives of the Cancer Society's Windward Unit who received the PACE (Priority Activities in Cancer Education) award from Drake Will, board chairman of the American Cancer Society's Hawaii Pacific Division . . .

Dexter S.Y. Seto, professor of Pediatrics at KWCRC received a \$9,700 grant from the Chamber of Commerce of Hawaii to establish the incidence of Hepatitis B infection in infants 12 to 15 months of age among breast- and formula-fed infants . . . The Chamber also awarded Hawaii Public Television \$31,120 to produce the fourth season of the medical series, "Body Talk."

Marianne Neifert wrote "Dr. Mom," which may oust Dr. Spock's "Baby and Child Care" . . . Marianne is assistant professor of pediatrics at the University of Colorado School of Medicine, mother of five children, and was named one of 1984's "10 Outstanding Working Women in America" by Glamour Magazine . . . Marianne almost didn't get accepted by the University of Hawaii Medical School . . . She had been valedictorian of Campbell High School's Class of '65 and a straight-A college student, but very pregnant when she went before the all-male admission committee.

Florence Chinn of the DSSH's new Health Care Administration Division was recognized by a U.S. Department of Health and Human Services official for reducing fraud and abuse in the Hawaii Medicaid Program . . .

Norman Goldstein of Pacific Laser was elected to the Small Business Council of America's business advisory committee at the council's annual meeting in Washington, D.C., in July.

program.

"Kahi Mohala's program is unique," said Orenstein. "We're the first in Hawaii to offer a truly comprehensive approach. We look at all aspects of the problem — psychological, medical, nutritional, and socio-cultural."

He also said that eating disorder programs focusing primarily on regulating weight and food intake or on treating the compulsive behavior simply as an addiction have had a poor rate of success.

"Food is not the primary issue here," Orenstein said. "Doctors often approach eating disorders as a dietary problem, but the research clearly shows that diets don't work for these complex eating problems."

"Bulimia, for example, is not a food addiction, though that's part of the problem. It's a misuse of the eating function. The bulimic is really struggling to cope

(Continued on page 38)

CLASSIFIED NOTICES

To place a Classified Notice, call Wagon at 521-0021. Four line min., approx. 5 words per line. Payment must accompany order.

EMPLOYMENT OPPORTUNITIES

PHYSICIANS NEEDED

Occasional assistance in administering physical exams to young men & women applying for the Armed Forces.

Hours dependent on number of physicals to be given, but usually 4 to 6 hours.

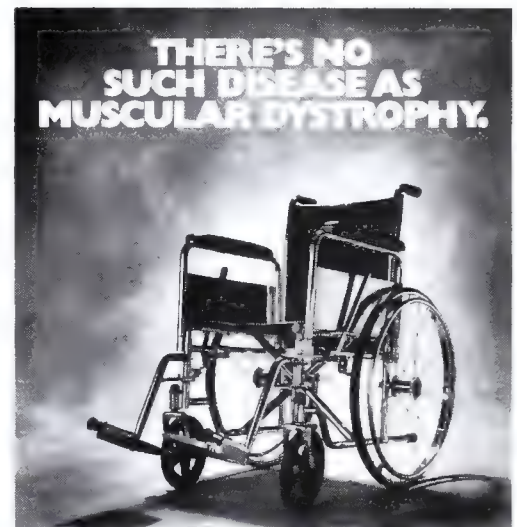
Compensation is \$125 to \$150 daily.

No malpractice insurance required.

Interested physicians should contact Dr. John Kustermann, 300 Ala Moana Blvd.

Rm. 3307, Hon. HI, 96850-0001

Ph. (808) 541-2997.



It's true. Because "muscular dystrophy" is the term for a group of twelve diseases—and no one disorder goes by that name.

Other facts about muscular dystrophy might surprise you, too. For one thing, the diseases aren't restricted to children. Anyone can be stricken, at any time.

For another thing, the Muscular Dystrophy Association battles not just the twelve muscular dystrophies, but twenty-eight other neuromuscular diseases, too.

At MDA, we're striving to put an end to all the devastating disorders you used to think of as muscular dystrophy.

And one day—we're determined—this chair will be empty for real.

MDA

Muscular Dystrophy Association
Jerry Lewis, National Chairman



Over the Editor's Desk

KAHI MOHALA ANNOUNCES ISLAND EATING DISORDERS PROGRAM—Kahi Mohala, a psychiatric hospital in Ewa Beach, has launched Hawaii's first inpatient eating disorders program to treat anorexia, bulimia, and other eating disorders.

Steven Orenstein, a clinical psychologist specializing in the treatment of eating disorders, has been named director of the

*Did
you
know?*

Saint Francis Medical Center is one of the top three hospitals in Hawaii . . . and the fastest growing.

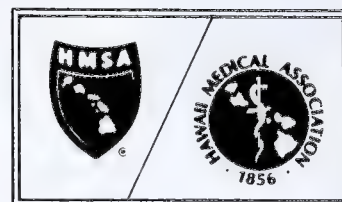
Leaders in quality health care.

Serving people of all faiths, beliefs, or ethnic backgrounds.



**Saint Francis
Medical Center**

Discover the Difference



HMSA Answers Physicians' Questions

Q: What is the status of negotiations with hospitals concerning hospital participation? Has the subscribers' out-of-pocket costs been contained or is it still open-ended?

A: In response to employer demand for more affordable health care plans that still maintain high-quality care, HMSA has developed a preferred provider program that includes participating hospitals as well as participating physicians and other providers. Nearly all of Hawaii's hospitals have signed participating agreements. Under these agreements, hospitals agree to receive prospective payments as payment in full for covered services to plan members, thereby limiting members' out-of-pocket costs. Participating agreements also feature effective utilization review, quality assurance activities, and incentives for hospitals to be efficient — all of which help to contain health care costs for their patients while maintaining quality care.

Q: Could you please give a summarized breakdown of HMSA's expenses. Please indicate the allocation for each of the following: (a) running HMSA, (b) hospital, (c) surgical, (d) medical, and (e) drug, vision, and dental.

A: The breakdown of HMSA's expenses in 1985 was as follows:

(a) HMSA administrative expenses	5.4%
(b) Hospital benefits.....	38.8%
(c) Surgical benefits.....	18.9%
(d) Medical benefits	26.5%
(e) Drug, vision and dental benefits	10.4%

PERSONAL LOAN

Dreams,
hopes,
goals . . .
you name it.
And remember
OUR name.
Whatever the
need, we'll
be there.



Central Pacific Bank
The Art of Service Member FDIC
Phone—544-0500

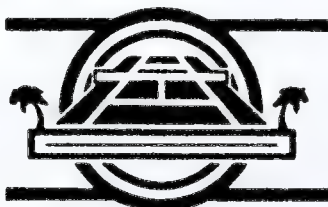
TENNIS COURTS

*Hawaii's #1
Tennis Court Builder,
Finisher & Supplier*

*Over 1,000 Quality
Installations*

All Islands — Since 1976

License #BC-8322



**SPECIALTY
SURFACING
COMPANY**
— HAWAII, INC. —

FREE ESTIMATES

847-0882

Hawaiian Tel
announces
a business
breakthrough.



SELEX.

It turns ordinary
phones into powerful
communication
systems.



Sophisticated new features for your present business phones.

SELEX is an advanced new service from Hawaiian Tel that can do wonders for your phone and for your business. Subscribe to SELEX and a phone that couldn't forward a call, suddenly can. A phone that wouldn't allow conference calling, suddenly will. A phone that already has these features can now have dozens more. With SELEX, phones that were once hampered by all the limitations of technology, suddenly aren't.

A menu of features to choose from.

Why do we call it SELEX? Because you select from up to 100 features for transmitting voice and data. If you want calls routed through the least expensive carrier, you've got it. If you want speed dialing, it's yours. If you want paging, just let us know. Because flexibility is part of the

system. You can add or drop features as you wish. And you pay only for the features you select.

All the necessary equipment is on our premises. Not yours.

What makes SELEX truly amazing is that in most cases, you don't have to buy a single piece of equipment to benefit from most features. (We do, however, carry phones designed to work especially well with SELEX and they can make your new system even more convenient.)

You see, most of the necessary hardware for SELEX is located at Hawaiian Tel. So there's no major capital outlay on your part. In almost every instance, the only equipment you'll need are the phones you already have.



We keep an eye on the system 24 hours a day.

Since there's nothing for you to buy, there's nothing for you to maintain. Hawaiian Tel maintains the system and monitors all the external equipment that makes SELEX possible. So problems are eliminated before you even notice them. It's like having a permanent watchdog looking after your phone system.



Now, you can rely on the same phones year after year after year...

Obsolescence is a thing of the past.

With SELEX, you get a system you can count on. Now, and in the future. Obsolescence was designed out of the system. When new technology creates new phone features, you can have them if you want them. Because Hawaiian Tel will make them available by simply updating our network. No changes are necessary to your phone.

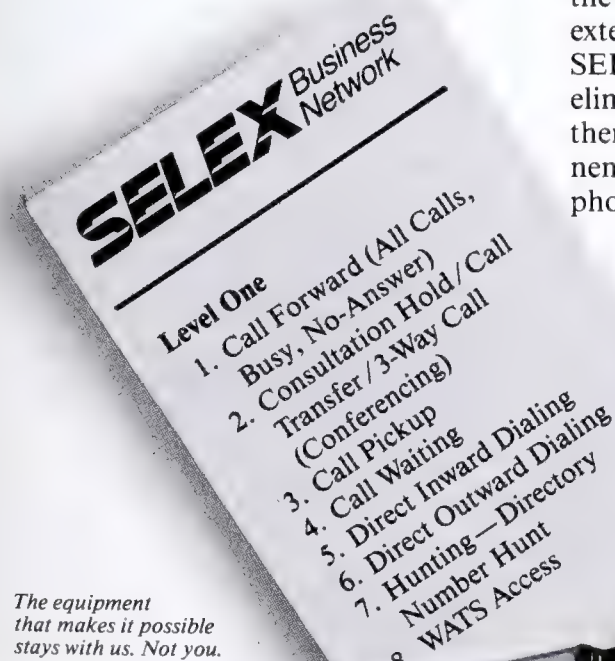
A business service for any size business.

SELEX is ideal whether you have two phone lines or hundreds of them. With phone lines in one office or in many different offices. In fact, SELEX can provide you with an integrated voice and data network that can be used between multiple offices on Oahu, and eventually between major Neighbor Islands. It's an advantage no other business system can provide.

We've served Hawaii business for over 100 years with a succession of innovative products and services. Now there's SELEX. A service that gives you everything you will ever want in a business communications system. Except the headaches. Find out more. Give us a call at 46-SELEX (467-3539).

HAWAIIAN TEL GTE

Beyond the call

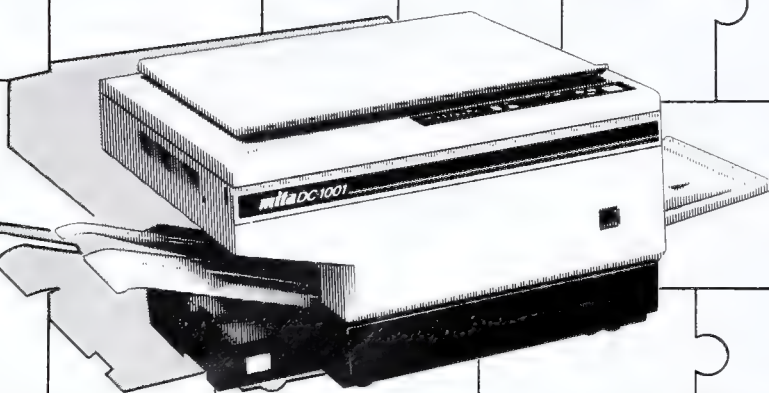


Impressive as this menu is, we'd need an even bigger ad to list all the features.

The equipment that makes it possible stays with us. Not you.

Package

Finally, A Compact Copier With A Non-Moving Top!



**Any Place You Put It,
The *mita* DC-1001
Fits Just Right!**

Picking the right copier is no longer a puzzle.
With its stationary top, the MITA DC-1001
fits and operates anywhere.

MITA's DC-1001 puts all the pieces together
with features like:

- Dual Paper Feed Sources
- Copies Up to 8½" x 14"
- Copies In Color - Black, Red, Blue,
Green, or Brown

The MITA DC-1001—THE COPIER FOR ALL PLACES!



OFFICE MACHINES

EARLE M. ALEXANDER, LTD.

SINCE 1954

488-7781



AUTHORIZED DEALER

OVER THE EDITOR'S DESK

(Continued from page 33)

with her emotions and with a variety of social and cultural pressures," he explained.

Using a multidisciplinary approach, the treatment team helps patients through individual, group, and family counseling and specialized therapies. Education and nutrition are also integral to the treatment program.

"Our patients leave with an understanding of their illness," Orenstein emphasized. "They learn the reasons for their behaviors and more effective ways to cope with stress. Along with getting their eating behavior under control, the patients learn what they need to do to improve their self-esteem and their relationships. They develop a healthier attitude about themselves and their bodies."

Kahi Mohala is now accepting eating disorder patients 24 hours a day, seven days a week. The hospital's licensed school is open to all adolescents as part of their daily treatment program.

Most health plans cover hospitalization and treatment. For admissions and other information on the program, call the Kahi Mohala admissions department at 671-8511.

FOUR-POUND ULTRASOUND MACHINE DISPLAYS ITS BEDSIDE MANNER—The first truly portable, battery-operated ultrasound instrument weighing only four pounds is now available to hospitals and physician offices.

Priced under \$9,000, the new device provides a real-time visual image of almost every soft-tissue organ in the body, aiding in the diagnosis of certain forms of cancer, gallstones, cirrhosis of the liver, pancreatic disease, and kidney stones.

Cardiologists can use the unit to evaluate the function of cardiac valves and chambers, and obstetricians can use it to monitor fetal growth and pregnancy problems. The light weight and slender size of the unit allows it to be moved anywhere within the hospital, including right to the patient's bedside. This portability can facilitate medical imaging for patients who may be at risk when moved from the emergency room or intensive care unit to the radiology department.



HAWAII REAL ESTATE REPORTER

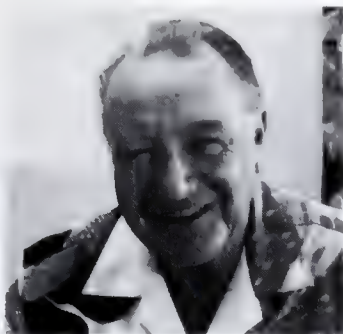
A monthly loose-leaf service from the publisher of Hawaii Legal Reporter.

Particularly helpful to Realtors, Attorneys, Financial Advisers and others who need to know of significant legal and administrative decisions related to real-estate in Hawaii.

Send for a free sample issue and decide for yourself if this service isn't worth far more than its modest price. Only \$10 a month (payable annually).

Start your subscription now or send for a free sample issue using your letterhead.

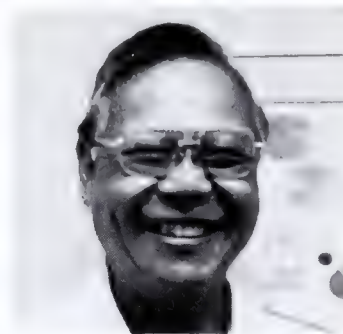
Legal Publishing Hawaii, Inc.
P.O. Box 27611 Honolulu, Hawaii 96827



Frank E. Ceccarelli, M.D.,
Urology



Susan H. Chapman, M.D.,
Obstetrics/Gynecology



Bernard Fong, M.D.
Cardiology



Alvin Furuike, M.D.,
Pulmonology



Thomas Y. Ito, M.D.,
Urology



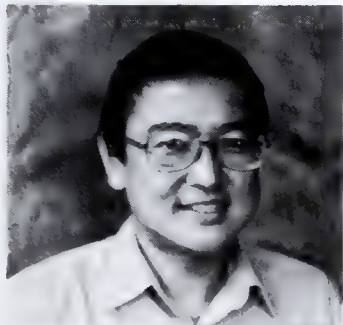
C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



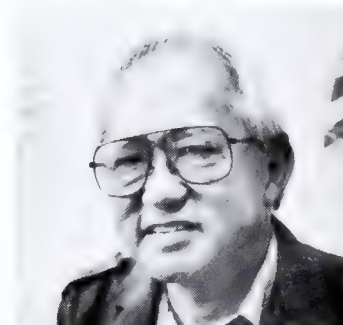
James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



Paul I. Sunahara, M.D.,
Dermatology

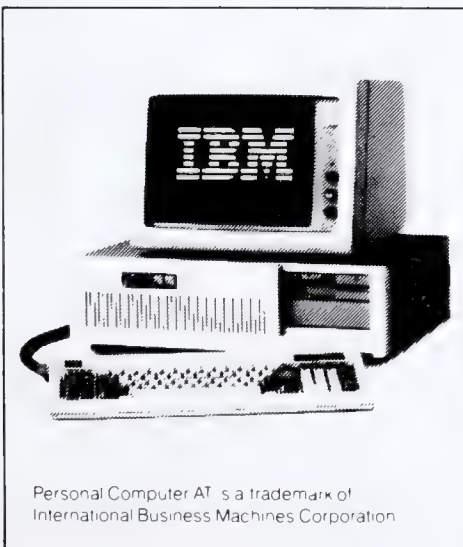


Henry L. Yim, M.D.,
Pediatrics

What do these doctors have in common?

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**



Personal Computer AT is a trademark of
International Business Machines Corporation

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary.



DON'T CHOKE 911.

Imagine: There's an emergency at your home. Someone is trying to break in. You reach for the phone. Dial 911. And get put on hold.

That's what happens when people choke-up Oahu's 911 emergency line with non-emergency requests. Like asking for driver's license information.

If you don't need the police *right away*, dial their regular numbers.

You can find them in the phone directory. And the next time you dial 911 just to save time, think about its real purpose. To save lives.

911. When you need help, not information.



A public service message from
FIRST HAWAIIAN BANK
We say yes to you.

Member FDIC

FEBRUARY 1987
VOL. 46, NO. 2

Hawaii MEDICAL JOURNAL

CONTENTS

FROM THE PRESIDENT	46
Walter W.Y. Chang, MD	
CONTINUING EDUCATION	46
LETTERS TO THE EDITOR	48
Re: Lifetime Medical Television Series	
EDITORIALS:	48
Kauai Symposium: Not To Be Missed!	
J.I. Frederick Reppun, MD	
Ratio of Physicians to Population	
J.I. Frederick Reppun, MD	
Lifetime Medical Television	
J.I. Frederick Reppun, MD	
ERRATUM	48
SURVEY OF OCCUPATIONAL INJURIES ON A LARGE PINEAPPLE PLANTATION DURING THE HARVESTING SEASON	52
James R. Langworthy, MD David Maligro, PA	
HEREDITARY THROMBOCYTOPENIA	56
Robert T.S. Jim, MD	
NEWS & NOTES	59
Henry Yokoyama, MD	
OVER THE EDITOR'S DESK	62
Stephen R.P.K. Brady, MD	
BOOK REVIEW	65
Manual of Clinical Problems in Pulmonary Medicine	
Douglas G. Massey, MD	
CLINICAL PATHOLOGIST'S EASY CHAIR	66
Epstein-Barr Virus (EBV) Infection	
Francis Fukunaga, MD	

LIBRARY
U.C. SAN FRANCISCO
FEB 24 1987



If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo) 329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**

140

120

100

80

60

40

20

0

130

110

90

70

50

30

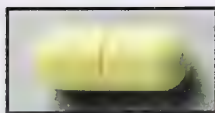
10

In mild to moderate hypertension

**THE FIRST
ONCE DAILY**

**CALCIUM
CHANNEL
BLOCKER**

NEW
ONCE DAILY



ISOPTIN[®] SR^{*}

(verapamil HCl/Knoll)

240 mg scored, sustained-release tablets



JAMES B.

38, black male, heavy smoker. Prescribed a diuretic by another physician last year for hypertension.

YOUR CONCERNS

Presents with "smoker's cough." Workup reveals a BP of 150/107.

A LOGICAL CHOICE FOR CONTROL OF HIS BP

ISOPTIN[®] (verapamil HCl/Knoll) because...

- Black hypertensives often have low plasma renin activity and generally do not respond favorably to beta blockers.
- Beta blockers may increase the likelihood of bronchospasm.

ALICE W.

65, diabetic, overweight. Her BP has elevated to 190/98.

YOUR CONCERNS

She's on daily insulin.

A LOGICAL CHOICE FOR CONTROL OF HER BP

ISOPTIN[®] (verapamil HCl/Knoll) because...

- Unlike most beta blockers and diuretics, ISOPTIN has no adverse effects on serum glucose levels.
- Unlike most beta blockers, ISOPTIN does not mask the symptoms of hypoglycemia.



THOMAS G.

70, asthmatic. In the past, BP adequately controlled with 25 mg hydrochlorothiazide daily.

YOUR CONCERNS

Today patient presents with symptoms of gout. Workup reveals high uric acid level, low serum potassium, and BP elevated to 180/98.

A LOGICAL CHOICE FOR CONTROL OF HIS BP

ISOPTIN[®] (verapamil HCl/Knoll) because...

- Unlike diuretics, ISOPTIN will not decrease serum potassium levels or elevate uric acid levels.
- Unlike beta blockers, ISOPTIN can be used safely in asthma and COPD patients.

JOHN K.

42, Annual physical uncovered diastolic BP of 102... confirmed on three successive office visits. Unresponsive to nonpharmacologic intervention.

YOUR CONCERNS

Salesman, spends many hours of his working day in car... total cholesterol level 300, HDL 35.

A LOGICAL CHOICE FOR CONTROL OF HIS BP

ISOPTIN[®] (verapamil HCl/Knoll) because...

- Unlike diuretics, ISOPTIN does not cause urinary urgency.
- Unlike either beta blockers or diuretics, ISOPTIN will not adversely affect his already seriously compromised lipid profile.
- Unlike with propranolol, fatigue and impotence are rarely reported.



**Antihypertensive therapy you
and your patients can live with**

*A product of Knoll research.

© 1986, BASF K & F Corporation

2538/1-87

Knoll Pharmaceuticals
A Unit of BASF K&F Corporation
Whippany, New Jersey 07981

BASF Group



Printed in U.S.A.

In mild to moderate hypertension THE FIRST ONCE DAILY CALCIUM CHANNEL BLOCKER

Brief Summary

ISOPTIN® SR (verapamil HCl/Knoll) 240 mg scored, sustained-release tablets

CONTRAINDICATIONS: 1) Severe left ventricular dysfunction (see WARNINGS), 2) Hypotension (less than 90 mmHg systolic pressure) or cardiogenic shock, 3) Sick sinus syndrome or 2nd or 3rd degree AV block (except in patients with a functioning artificial ventricular pacemaker)

WARNINGS: **Heart Failure:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (see DRUG INTERACTIONS). Patients with milder ventricular dysfunction should, if possible, be controlled before verapamil treatment. Hypotension: ISOPTIN (verapamil HCl) may produce occasional symptomatic hypotension. Elevated Liver Enzymes: Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Periodic monitoring of liver function in patients receiving verapamil is therefore prudent. Accessory Bypass Tract (Wolff-Parkinson-White): Patients with paroxysmal and/or chronic atrial flutter or atrial fibrillation and a coexisting accessory AV pathway have developed increased antegrade conduction across the accessory pathway producing a very rapid ventricular response or ventricular fibrillation after receiving intravenous verapamil. While this has not been reported with oral verapamil, it should be considered a potential risk. Treatment is usually D.C.-cardioversion. Atrioventricular Block: The effect of verapamil on AV conduction and the SA node may cause asymptomatic 1st degree AV block and transient bradycardia. Higher degrees of AV block, while infrequent (0.8%), may require a reduction in dosage or, in rare instances, discontinuation of verapamil HCl. Patients with Hypertrophic Cardiomyopathy (IHSS): Although verapamil has been used in the therapy of patients with IHSS, severe cardiovascular decompensation and death have been noted in this patient population.

PRECAUTIONS: **Impaired Hepatic or Renal Function:** Verapamil is highly metabolized by the liver with about 70% of an administered dose excreted in the urine. In patients with impaired hepatic or renal function verapamil should be administered cautiously and the patients monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacological effects (see OVERDOSAGE).

Drug Interactions: **Beta Blockers:** Concomitant use of ISOPTIN and oral beta-adrenergic blocking agents may be beneficial in certain patients with chronic stable angina or hypertension, but available information is not sufficient to predict with confidence the effects of concurrent treatment in patients with left ventricular dysfunction or cardiac conduction abnormalities. **Digitalis:** Clinical use of verapamil in digitalized patients has shown the combination to be well tolerated if digoxin doses are properly adjusted. However, chronic verapamil treatment increases serum digoxin levels by 50 to 75% during the first week of therapy and this can result in digitalis toxicity. Upon discontinuation of ISOPTIN (verapamil HCl), the patient should be reassessed to avoid underdigitalization. **Antihypertensive Agents:** Verapamil administered concomitantly with oral antihypertensive agents (e.g., vasodilators, angiotensin-converting enzyme inhibitors, diuretics, beta blockers, prazosin) will usually have an additive effect on lowering blood pressure. Patients receiving these combinations should be appropriately monitored. **Disopyramide:** Disopyramide should not be administered within 48 hours before or 24 hours after verapamil administration. **Quinidine:** In patients with hypertrophic cardiomyopathy (IHSS), concomitant use of verapamil and quinidine resulted in significant hypotension. There has been a report of increased quinidine levels during verapamil therapy. **Nitrates:** The pharmacologic profile of verapamil and nitrates as well as clinical experience suggest beneficial interactions. **Cimetidine:** Two clinical trials have shown a lack of significant verapamil interaction with cimetidine. A third study showed cimetidine reduced verapamil clearance and increased elimination to 1/2. **Anesthetic Agents:** Verapamil may potentiate the activity of neuromuscular blocking agents and inhalation anesthetics. **Carbamazepine:** Verapamil may increase carbamazepine concentrations during combined therapy. **Rifampin:** Therapy with rifampin may markedly reduce oral verapamil bioavailability. **Lithium:** Verapamil may lower lithium levels in patient on chronic oral lithium therapy. **Carcinogenesis, Mutagenesis, Impairment of Fertility:** There was no evidence of a carcinogenic potential of verapamil administered to rats for two years. Verapamil was not mutagenic in the Ames test. Studies in female rats did not show impaired fertility. Effects on male fertility have not been determined. **Pregnancy (Category C):** There are no adequate and well-controlled studies in pregnant women. ISOPTIN crosses the placental barrier and can be detected in umbilical vein blood at delivery. This drug should be used during pregnancy, labor, and delivery, only if clearly needed. **Nursing Mothers:** ISOPTIN is excreted in human milk, therefore, nursing should be discontinued while verapamil is administered. **Pediatric Use:** Safety and efficacy of ISOPTIN in children below the age of 18 years have not been established.

ADVERSE REACTIONS: Constipation 8.4%, dizziness 3.5%, nausea 2.7%, hypotension 2.5%, edema 2.1%, headache 1.9%, CHF/pulmonary edema 1.8%, fatigue 1.7%, bradycardia 1.4%, 3° AV block 0.8%, flushing 0.1%, elevated liver enzymes (see WARNINGS). The following reactions, reported in less than 1.0% of patients, occurred under conditions (open trials, marketing experience) where a causal relationship is uncertain; they are mentioned to alert the physician to a possible relationship: angina pectoris, arthralgia and rash, AV block, blurred vision, cerebrovascular accident, chest pain, claudication, confusion, diarrhea, dry mouth, dyspnea, ecchymosis or bruising, equilibrium disorders, exanthema, gastrointestinal distress, gingival hyperplasia, gynecomastia, hair loss, hyperkeratosis, impotence, increased urination, insomnia, macules, muscle cramps, myocardial infarction, palpitations, paresthesia, psychotic symptoms, purpura (vasculitis), shakiness, somnolence, spotty menstruation, sweating, syncope, urticaria. **Treatment of Acute Cardiovascular Adverse Reactions:** Whenever severe hypotension or complete AV block occur following oral administration of verapamil, the appropriate emergency measures should be applied immediately, e.g., intravenously administered isoproterenol HCl, levalterenol bitartrate, atropine (all in the usual doses), or calcium gluconate (10% solution). If further support is necessary, inotropic agents (dopamine or dobutamine) may be administered. Actual treatment and dosage should depend on the severity and the clinical situation and the judgment and experience of the treating physician.

OVERDOSAGE: Treatment of overdosage should be supportive. Beta-adrenergic stimulation or parenteral administration of calcium solutions may increase calcium ion flux across the slow channel, and have been used effectively in treatment of deliberate overdosage with verapamil. Clinically significant hypotensive reactions or fixed high degree AV block should be treated with vasopressor agents or cardiac pacing, respectively. Asystole should be handled by the usual measures including cardiopulmonary resuscitation.

Knoll Pharmaceuticals
A Unit of BASF K&F Corporation
Whippany, New Jersey 07981

BASF Group
©1986, BASF K&F Corporation



2474/11/86

Printed in U.S.A.

Hawaii MEDICAL JOURNAL

(USPS 237-640)

Published Monthly for the

HAWAII MEDICAL ASSOCIATION
(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD
Founding Editor: HARRY L. ARNOLD JR., MD
News Editor: HENRY N. YOKOYAMA, MD
Consulting Editor: DORIS R. JASINSKI, MD, MPH
Assistant Editor and Book Review Editor: DOUGLAS G. MASSEY, MD
Contributing Editors: JOHN M. CORBOY, MD, FRANCIS H. FUKUNAGA, MD, CHARLES S. JUDD, JR., MD, **Managing Editor:** CHARLOTTE BEAL
Editorial Assistants: BECKY KENDRO, JUDI KINGREY
Copy Editor: GWENDOLYN CHANG HULLEMAN
Graphic Artist: J. CHARLES DAVIS

Editorial Board

NORMAN GOLDSTEIN, MD,
THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,
JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD
(Commissioner)
HENRY N. YOKOYAMA, MD
(Chairman)

STEPHEN R.P.K. BRADY, MD, NATHANIEL P.H. CHING, MD,
FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,
JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,
JAMES P. McGUIRE, MD, DAMKERNG PATHOMVANICH, MD,
ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,
J.I. FREDERICK REPPUN, MD, TERRY C.Y. WONG, MD,
ELLA EDWARDS (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD
President-Elect: JAMES LUMENG, MD
Past President: RUSSELL T. STODD, MD
Secretary: JOHN KIM, MD
Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD
Honolulu: JOHN T. McDONNELL, MD
Kauai: THOMAS GROLLMAN, MD
Mau: HELEN S. PERCY, MD
West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD
CALVIN C.M. KAM, MD
Alternate Delegates to AMA
WALTER W.Y. CHANG, MD
RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.
Post Office Box 833
Honolulu, Hawaii 96808
Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.
16 Bruce Park Avenue
Greenwich, Connecticut 06830
Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.



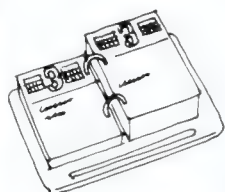
FROM THE PRESIDENT

The New Year has brought a new governor and cabinet into being. Seemingly not many of the old Burns-Ariyoshi factions are part of Gov. Waihee's administration. He has made an excellent choice in appointing Dr. John Lewin as the Department of Health director. Dr. Lewin brings expertise, experience, and, above all, clinical skills and practice to that most important post.

The Legislature will have been in session almost a month when this message is published. Your association will continue to intercede and act on your behalf on medical matters affecting our progression. Becky Kendro and Ray Higa along with Dr. Dick Lundborg and Charles Ushijima will be at the Legislature. Tort Reform, Medical Practice Act modifications, increase in Health Provider DSSH fees will be some of those subjects of concern to us.

We welcome any of you who are interested in working with us or the Legislative Committee. Contributions to HAMPAC will also be gratefully accepted.

Walter W.Y. Chang, MD
President



Continuing Medical Education

CALENDAR OF ACCREDITED EVENTS—CATEGORY 1

Accredited Programs of CME allow one unit of AMA credit for each hour of instruction excluding all "breaks." Some programs also are accredited for AAFP prescribed credit.

LOCAL ACCREDITED PROGRAMS ONGOING

For a complete list of ongoing programs, please refer to the March 1986 issue of the HAWAII MEDICAL JOURNAL. Further information is available through the individual institutions or through the HMA's CME Department.

SPECIAL EVENTS

All special events should be confirmed with the CME program sponsors, as cancellations are not necessarily reported to the HAWAII MEDICAL JOURNAL.

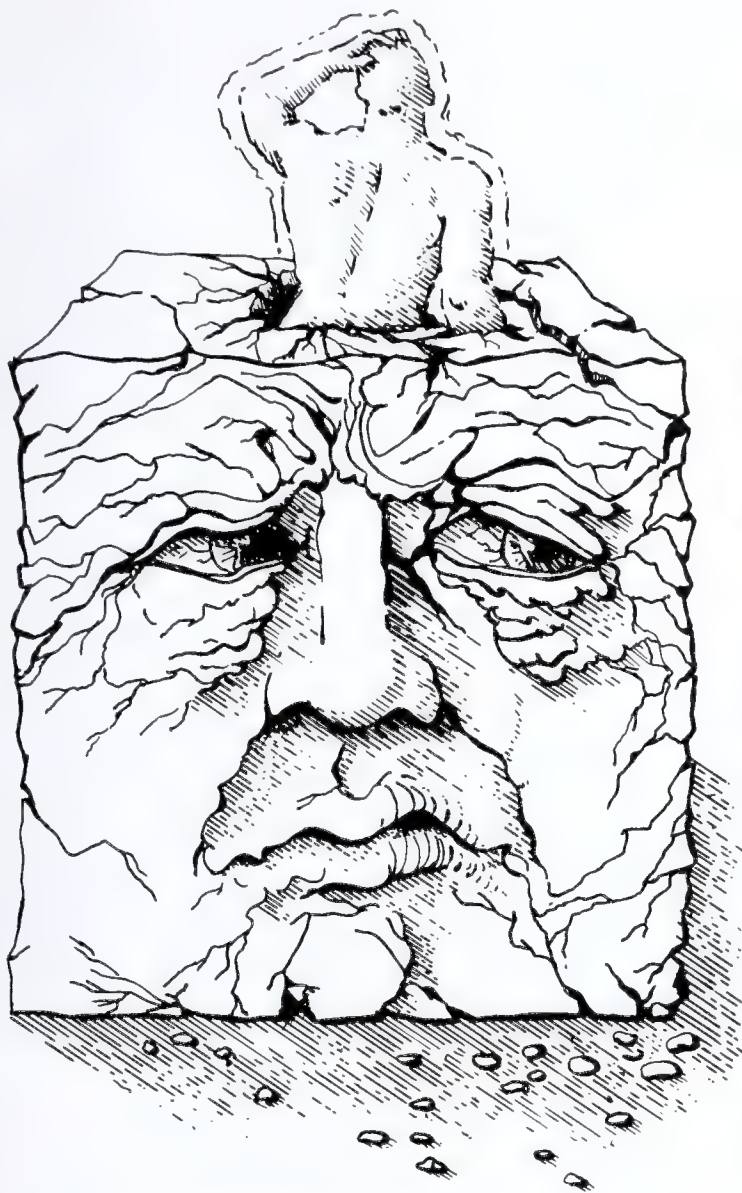
March 16-20, 1987 Epidemics, Pandemics, and Mass Hysteria: From Antiquity to AIDS, The Kauai Foundation for Continuing Medical Education, Pamela Cushnie, 3420-B Kuhio Hwy., Lihue, Hawaii (808) 245-1507. Location: Poipu Beach, Kauai.

March 16-20, 1987 Sports Medicine for the Primary Physician, University of Hawaii, School of Medicine, (808) 948-8244. Location: Waikiki, Honolulu.

March 16-21, 1987 Diagnostic Imaging 1987 CT, Ultrasound, MRI and Emergency Room Radiology, University of California San Francisco, Radiology Post Graduate Education, (415) 476-5731. Location: Waiohai, Kauai.

March 22-26, 1987 Respiratory Diseases: Diagnosis and Management, Medical Education Resources, American College of Allergists, (800) 421-3756. Location: Royal Lahaina, Maui.

March 23-27, 1987 OB/GYN Update 1987, co-sponsored with the University of Washington, Department of Obstetrics and Gynecology. Location: Sheraton Royal Waikoloa.



Do you have patients who are in PAIN? . . .

- always complaining?
- very emotionally demanding?
- not motivated to go back to work?
- questioning your judgement?
- dependent on medication?
- visiting physicians and healthcare providers frequently?
- alienating family and friends?

They should probably be evaluated at the PAIN CENTER.

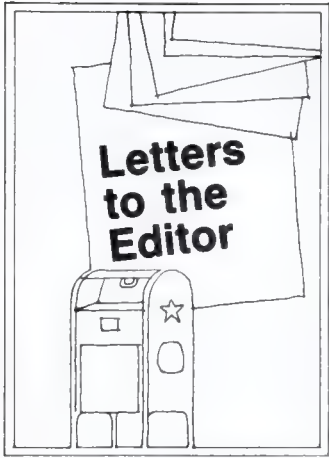
The **PAIN CENTER** is a specialized, interdisciplinary inpatient and outpatient program which objectively evaluates and treats patients with chronic pain. For information on how to refer your PAIN patients to the **PAIN CENTER**, call:

531-3511

PAIN CENTER

Rehabilitation Hospital of the Pacific
226 N. Kuakini St.





RE: Lifetime Medical Television Series

I would like to bring to the attention of all physicians in the Honolulu area the fact that Oceanic Television has discontinued the "Lifetime Medical Television" program, which has been on their program (schedule) every Sunday for several years.

I know I'm not speaking only for myself when I say that this program has been of tremendous benefit to me personally in keeping me up-to-date not only in my own specialty but in other areas as well. The information transmitted has been up-to-date, even more so than the articles that appear in journals, which are usually six months to a year behind. I feel it is a real loss to the medical community to be without this program.

It would be my suggestion that all physicians interested in the program contact Oceanic Television either personally, by phone or by letter, and make known their appreciation for viewing the program in the past and urging the television (company) to return it as soon as possible.

If the station would simply run the program for a four-hour stretch anytime, either Sunday or even in the middle of the night, it could be taped for future viewing; thus, it would not interfere with their commercial endeavor.

Alexander Roth, MD
Department of Allergy
Hawaii Permanente Medical Group Inc.



Kauai Symposium: Not To Be Missed!

Kauai: The Separate Kingdom by Edward Joesting is a fascinating treatise on that island's Hawaiian history up to the time of annexation at the close of the last century. The book came out in 1984, published by the University of Hawaii Press. It projected that island's enormous distance of 90 miles of rough ocean separating it from the rest of the major islands of Hawaii Nei as an explanation for its relative isolation. In a way, Kauai did not participate as much in the rapid development and modernization that overtook the islands with the coming of Western civilization.

So has it been, also, from the point of view of organized medicine. Many an old-timer physician member of the Honolulu County Medical Society and of the HMA can still recall, with nostalgia, his or her early beginnings in the practice of medicine as a sugar plantation doctor on the Garden Island. Consequent-

ly, some big city medical elitists here still think of medicine as practiced on Kauai as being in the realm of barefoot doctors out in the sticks.

That view, however, is changing rapidly. We now know that Kauai has a good complement of well-trained specialists in nearly every field of medicine; it has groups and HMOs just as on Oahu. It has less and less need of periodic visits by specialists from Oahu. Its physicians are becoming organized as a profession and their concern with local CME is becoming manifest.

As an example of this sophistication, the Kauai Foundation for Continuing Education, under the chairmanship of dermatologist David Elpern, is putting on an impressive symposium, March 16-20, 1987, at Poipu.

What's particularly and uniquely commendable about it is that the planning committee includes representatives from the community; it focuses on the humanities admixed with the medical sciences and thus brings people from all walks of life into a medical symposium atmosphere for the benefit of all.

Another unique feature is the inclusion of Seymour Farber, MD, in the planning committee. He is the emeritus vice chancellor of the CME program of the University of California system; he and his wife have fallen in love with Kauai (Who can resist Kauai's charms?) and have made it their second home.

Farber continues to be a member of the California Post-Secondary Education Commission and he maintains his interest in upgrading the quality of CME symposia by emphasizing the well-being of the whole patient, of which all physicians need to be reminded continuously in this day and age of high technology.

"When I was head of the CME Department of the UCSF campus," writes Farber in a personal communication, "I introduced major symposia which emphasized the importance of the Humanities in medicine. We had philosophers, historians, musicians, anthropologists, etc. appear on *our* campus — and

(Continued on page 50)



CAN YOU TRUST YOURSELF WITH \$150,000?

Perhaps. But with investments of \$150,000 or more, you'll need a genuine professional, part guardian angel.

A full-time investment manager.

One who thrives on the day-to-day challenge of investment decisions. Follows your objectives to solve riddles of immediate gain vs. long-term growth. Knows new tax laws before the ink dries, and diversifies investments in ways seldom available to individual investors.

Bright and aggressive, yet someone to trust with your family far into the future.

No one person can accomplish all this. Only a trust company can. In particular, Hawaiian Trust Company.

Hawaiian Trust performs. For fiscal '85-'86, the stocks of our Contract Equity Fund at 30.6%* tracked with Standard & Poor's 31.7%. The bonds of our Contract Fixed Income Fund outperformed Salomon Brothers'; 27.9%* to 27.7%. In commercial real estate, we're relied on, daily, for everything from tough collections to a fresh coat of paint.

The full service of Hawaii's oldest, largest and most productive trust and investment company is within easy reach. Send us the attached reply card or phone 525-7567.

Hawaiian Trust Company, Ltd.

A Trust and Investment Company of

h Bancorp Hawaii

*Annualized rates of return for Hawaiian Trust's investment funds for qualified plans from October 1985 through September 1986. Yields will vary with changing market conditions. Past performance is not necessarily an indication of future results.

(Continued from page 48)

not in Las Vegas, Aspen, or Malta — for these symposia. The names of some of these may be familiar to you: *Control of the Mind*; *Conflict and Creativity*; *The Family Search for Survival*; *The Potential of Woman*; *Food and Civilization*; and Teilhard de Chardin's *In quest of the Perfection of Man*, to name but a few.

It is easy to figure out that Farber was attracted to what Dave Elpern is trying to do: Collaboration ensued.

Epidemics, Pandemics and Mass Hysteria, the title of the March symposium, should therefore attract Hawaii's physicians. We call attention to it because of its unique character and also because it is co-sponsored by the HMA. The program's "Precis" is worth quoting verbatim:

"With little warning, a unique pandemic has been thrust upon the world. Almost 2 million Americans are infected with a newly recognized vector, the AIDS virus, making this a true epidemic. It is only through the perspectives of historical, humanistic, and scientific recordings that we can begin to understand the present devastation.

"Because of the complexity of the problems implicit in a pandemic, this symposium cannot hope to solve all of them. But, it can help to bring solutions nearer through meaningful discussions between scholars drawn from many disciplines.

"A presentation of societal, psychological, economic and governmental aspects is also essential in understanding the impact of a pandemic, both from the national and the international point of view.

"This symposium is being organized with these principles in mind. It endeavors to present the best knowledge available, by assembling to clarify needed research and action for the present and for the future.

"Physicians, dentists, and all other health professionals, educators and all others of the lay public who are interested are invited to attend."

Albert B. Sabin, MD, emeritus distinguished research professor, University of Cincinnati and Medical University of South Carolina, will be the keynote and opening speaker on Monday evening, March 16, at the Sheraton-Kauai in Waiohale.

Readers of the JOURNAL are being encouraged to call the HMA offices for details of program topics that are to be addressed by eminent Mainland, Hawaii, and local Kauai speakers and panels.

J.I. Frederick Reppun, MD
Editor

Ratio of Physicians to Population

The Dec. 5, 1986, issue of JAMA has in its section: *JAMA 100 Years Ago* a commentary on the ratio of physicians to population. This was in 1886, mind you! It makes for interesting speculation. Unfortunately, Assistant Editor Elizabeth Knoll does not satisfy our wonder as to how the hundred years-ago figures compare with the present.

Then, France's ratio of "medical men" (no women?) to persons in the general population was the lowest (presumably in the civilized world) at 2.91 per 10,000, and in the USA it was the highest at 13.24.

According to figures bandied about at HMA Council meetings recently, in October of 1985 there were 1,805 "practicing physicians" in Hawaii, and projected to be about 1,900 the same month in 1986. Using this figure and a generally accepted figure of a million population in the state, the ratio here and now is 19 per 10,000 (counting male and female MDs and DOs) or, put in another perspective, one physician to 554 persons.

Is an increase of 50% in a hundred years remarkable? Is it good? Is it bad?

As an aside, it is worth wondering what physicians' fees were a hundred years ago. Locally, in a recent HCMS Board of Governors Bulletin, the asking rate — better yet, the preferred salary — for a beginner board-certified internist on a Neighbor Island was advertised at \$65,000 to \$70,000 a year by an HMO!

J.I. Frederick Reppun, MD
Editor

Lifetime Medical Television

In this issue of the JOURNAL the reader will note a letter to the editor written by HMA member Alex Roth of the Hawaii Permanente Medical Group, deploring the elimination on Cablevision of the every Sunday "Lifetime Medical Television" series.

According to Alex, he has found it to be an excellent, if not the best, means "in keeping me up-to-date not only in my own specialty (allergy), but in other areas as well." He continues on to say: "The information transmitted has been up-to-date, even more so than the articles that appear in journals," which he says are more often than not late in reaching us here in Hawaii.

The JOURNAL would be interested in hearing from others of our profession as to the prevalence of viewership of this program.

"Lifetime Medical Television" is a product of Hearst/ABC-Viacom Entertainment Services and its programs are sponsored by various pharmaceutical companies and health-related organizations. It undoubtedly has appeal to the general public as well.

Alex Roth has been unable to determine why the program has been pulled.

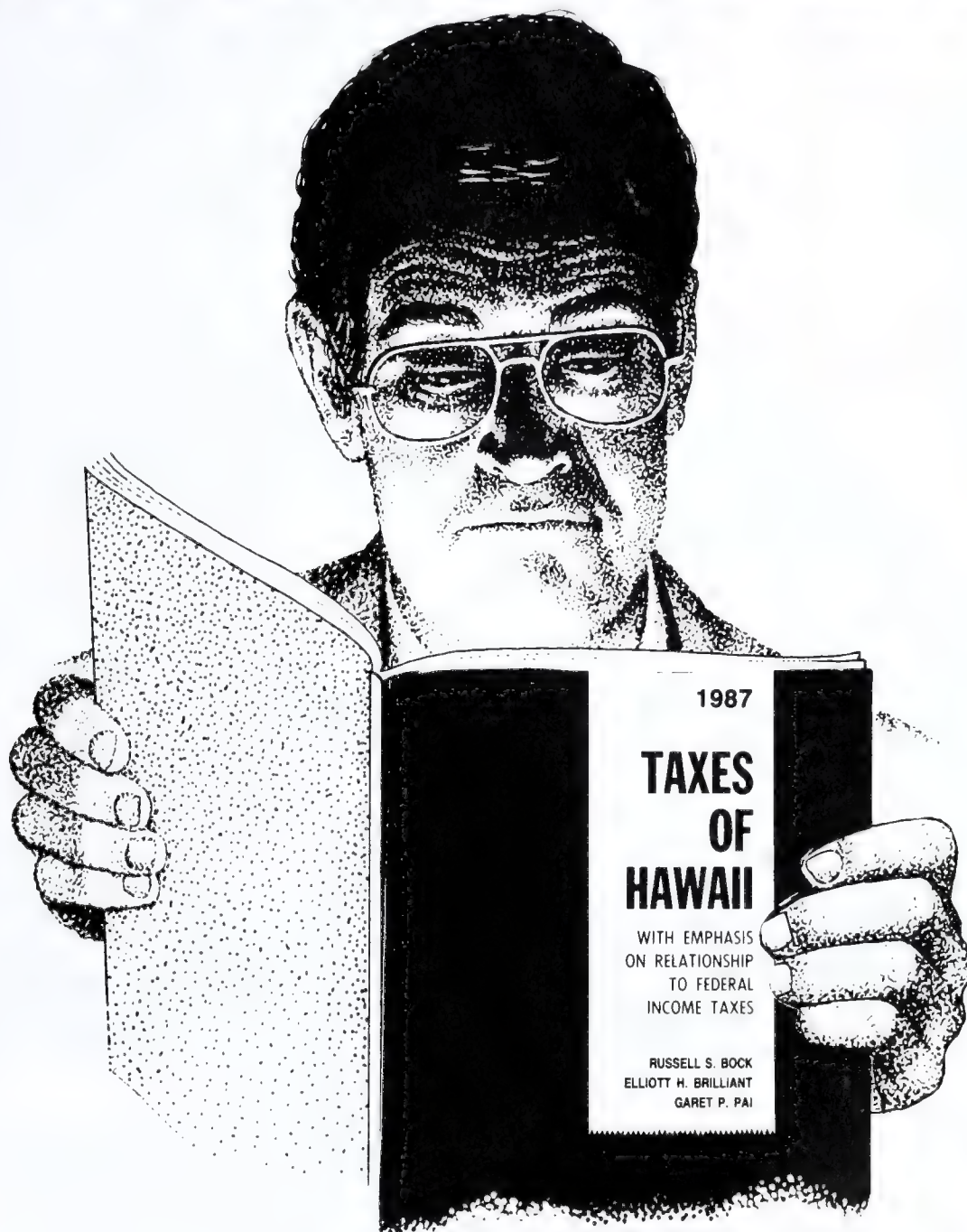
J.I. Frederick Reppun, MD
Editor

Erratum

In the October 1986 issue of the Hawaii Medical Journal, the article "Effects of Nuclear Medicine" by J.I. Frederick Reppun, MD, was incorrectly titled. The correct title is "Effects of Nuclear Weapons."

Also, in that same issue, the index does not include the editorial on "Out-of-Court Settlement."

THE NUMBERS GAME



Taxes of Hawaii can resolve all your state tax problems because it provides a complete package, including the latest tax changes in one concise book updated annually.

Don't let the numbers game get you down. See how Hawaii taxes relate to Federal changes, all in one complete package that includes withholding tables, telephone numbers, tax court and Attorney General opinions and rulings.

Its more than 413 pages are packed with up-to-date information and tables.

No price increase—still \$14.95 per copy, postage and tax included. Add \$1.65 for Mainland first-class delivery. Discounts for 6 or more copies ordered at same time. Payment must accompany single copy orders.



Crossroads Press, Inc.

P.O. Box 833 Honolulu, Hi. 96808

PLEASE PRINT

Please send _____ copies of the 1987 edition of
TAXES OF HAWAII at \$14.95 per copy, postpaid.

() Payment enclosed () Please invoice

Required for single copy orders.

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Survey of Occupational Injuries on a Large Pineapple Plantation During the Harvesting Season

James R. Langworthy, MD*

David Maligro, PA**

Although in recent years it has had some economic difficulty, agriculture remains the third-largest industry in the State of Hawaii after tourism, government and military service. It employs a large number of people, especially on the Neighbor Islands.

Introduction

This survey was taken during a three-month harvesting period on the Dole Plantation, which is on the island of Lanai. It is the largest pineapple plantation in the State of Hawaii and one of the largest in the world, covering some 20,000 acres.

We were interested in classifying the types of injuries that occurred and which jobs and which departments were most frequently involved in injuries.

The first step in designing a preventive program is to identify the problems and this survey was done for that purpose.

As many of the doctors in the state practice in areas where they attend workers injured in agricultural situations, we felt that it would be of use to these practitioners to know the classification of injuries; that information is presented herewith.

Discussion

The largest category of injuries involved the upper extremities. Most of these were the result of the repetitive motion that is required by the pineapple-picking laborers. This job requires a worker to twist the crown off the fruit and then place the fruit on a conveyor boom, which the workers follow through the fields. The repetitive motion causes tendinitis and, occasion-

ally, carpal tunnel syndrome. These injuries usually occurred in new workers and were less common in the more experienced groups.

(Continued on page 55)

TABLE I

Category	Percent of 234 Accidents
Harvesting (pineapple-picking)	76.3
Planting (planting of pineapple crowns or new crops)	7.2
Field maintenance (preparation of field for planting, operating tractors, spray trucks, graders, etc.)	2.5
Engineering (mainly mechanics, welders)	8.9
Personnel (clerical)	1.7
Harbor* (laborers, dock-workers)	1.2
Storeroom (clerks, supply warehouse, freight)	1.2
Utility (custodians, workers on rehabilitation)	0.4

* At Kamalapa Harbor the fruit are loaded onto barges for shipment to the cannery on Oahu.

TABLE II

Category	No. of Accidents	Percent of 234 Acci- dents
Laborers — mainly pickers	185	79
Mechanics	15	6.4
Equipment operators	11	4.7
Truck drivers	7	2.9
Misc. (supervisor, cooks, clerks)	16	6.8

Accepted for publication September 1986

* Straub Occupational Health Services,
848 S. Beretania St., Suite 101,
Honolulu, Hawaii 96813

** Orthopedic Department, Kaiser Hospital.

Correspondence: James R. Langworthy, MD
848 S. Beretania St., #101
Honolulu, Hawaii 96813

**Facts about today's
corporate environment.**



Your survival depends on the financial direction you take today.

**So you need a bank
with the skill and
commitment to help
you manage your
cash.** One with a full array of
advanced business services tailored
to your needs.

First Interstate Bank.

While today some banks are cutting back services, we are not. So we can commit to helping you operate more efficiently now and in the future with a broad range of credit and non-credit products.

First Interstate products and services are backed by the unique strengths of the First Interstate system and are used by 70 of the Fortune 100. First Interstate has over 1,100 full-service banking offices in 18 states, and international banking offices in 22 foreign countries.

We can tailor products to your specific needs: wholesale lock box, CashLink™ controlled disbursement, comprehensive payroll systems and automated accounting and reporting services.

In addition, First Interstate provides innovative financing techniques for the short-term or long-

term, revolving lines, stand-by lines, inventory and equipment financing as well as commercial mortgage financing for office improvement or project development.

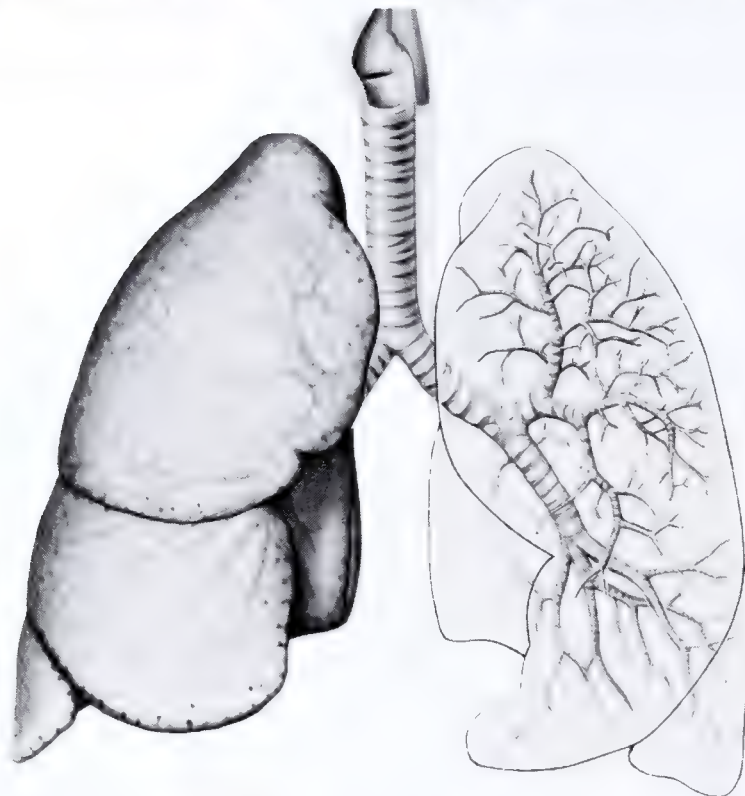
Get a clear financial direction from the single source for all your business banking needs. Call the Business Banking Group of First Interstate Bank of Hawaii at 525-6820 today.



**First
Interstate**
Bank

Member FDIC

Consider the causative organisms...



Ceclor[®]
cefactor

250-mg Pulvules[®] t.i.d.
offers effectiveness against
the major causes of bacterial bronchitis

Haemophilus influenzae*, *H influenzae*, *Streptococcus pneumoniae*, *Streptococcus pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Note: Ceclor[®] is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Ceclor[®] (cefactor)

Summary: Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS. Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-

associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor

penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

- Therapy-related adverse reactions are uncommon. Those reported include:
 - Gastrointestinal (mostly diarrhea): 2.5%.
 - Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
 - Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis: elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistix[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

© 1986 ELI LILLY AND COMPANY | 060485L.R |

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

600332

TABLE III

Category	No. of Injuries	Percent of Injuries
Upper Extremities:	74	31.0
Shoulder strains/tendinitis/rotator cuff tears	9	0.3
Elbow epicondylitis/contusions	7	2.9
Wrists (mainly tenosynovitis from overuse/rare fx)	24	10.1
Fingers & hands (mainly contusions/sprains/rare fx)	33	13.9
Arm — strained muscle	1	0.4
Eye Injuries (23 conjunctivitis and 36 corneal abrasions)	59	.25
Lower Extremities:	25	10.5
Leg (contusions/muscle strains)	3	1.2
Knee (contusions/internal derangement & strains)	11	4.6
Foot and ankle (sprains, contusions)	10	4.2
Hip (contusion)	1	
Skin Problems:	20	8.3
Infections of soft tissue; punctures, cuts	12	0.5
Dermatitis, mostly suspected from chemical exposures	8	3.3
Back Injuries (mostly low back strains)	17	7.2
Abrasions, Lacerations, Puncture Wounds	14	5.9
Insect Bites (bees and centipedes)	4	1.6
Trunk Injuries (mainly contusions from thrown fruit, includes chest wall)	4	1.6
Neck Injuries (mainly cervical strains)	3	1.2
Burns (mainly second-degree and small areas only)	3	1.2
Heat Exhaustion	3	1.2
Head Injuries (mainly contusion onto conveyor boom)	2	0.8
Mouth and Teeth (mainly contusions/loose teeth or braces)	2	0.8
Foreign Body in Soft Tissue	1	0.4
Muscle Cramps	1	0.4
Carpopedal Spasm (Hyperventilation)	1	0.4
Nosebleed	1	0.4
Finger Fracture	1	0.4
Broken Eyeglasses	1	0.4

The second most common category included eye injuries and conjunctivitis. All of the workers involved in harvesting are supplied with a pair of wire-mesh goggles and the company requires the workers to wear these during the picking operation. Most of the injuries occurred when the sharply pointed leaf tip of the crown of the pineapple penetrated under the goggles or through the wire mesh.

Lower extremity injuries usually resulted from walking on uneven ground and twisting the knee or ankle.

Dermatological problems, which in most industrial settings represent the most common category of workers' compensation claims, were not very frequent, representing only 8% of cases seen.

Low back injuries are present in every work setting and farming is no exception; we were somewhat surprised to find that these comprised only 7.2% of claims.

We hope that this survey will be of use to those responsible for planning safety programs in the Hawaiian agricultural industry.

BIBLIOGRAPHY

1. Occupational Diseases, June 1977. US Department of Health Education and Welfare, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health.
2. OSHA General Industry Standards, US Department of Labor, Occupational Safety and Health Administration, OSHA, March 8, 1983.
3. Levy BS and Wegman DH: Occupational Health, Little Brown & Co., 1983.
4. Rom WN: Environmental and Occupational Medicine, Little Brown & Co., 1983.
5. Last JM (Maxcy-Rosenau), Public Health and Preventive Medicine, Appleton-Century-Crofts, 1980.

Hereditary Thrombocytopenia

Robert T.S. Jim, MD*

Hereditary thrombocytopenia is uncommon. The present report concerns hereditary thrombocytopenia occurring in a niece and uncle.

Case Reports

L.S., a young woman, was first seen at the age of 17 in 1969 for iron deficiency anemia due to functional menorrhagia. CBC revealed WBC 6750/cmm, hemoglobin 9.6 gm, differential blood smear with segs 69%, bands 2%, lymphocytes 24%, monocytes 4%, eosinophils 1%. Microcytosis and hypochromia and "adequate platelets" were found on the blood smear. Serum iron was 5 mcgm%, unsaturated iron binding capacity was 75 mcgm% and total iron binding capacity was 380 mcgm%. Saturation of total iron binding capacity was 1%.

She was seen again in 1980, age 29, for bruises for many years and frequent colds. Physical exam revealed a small keloid over the right elbow. CBC revealed WB 5400/cmm, hemoglobin 15.7 gm, MCV 87 MCH 29 MCHC 33, differential blood smear of segs 54, bands 20, lymphs 25, monocytes 5, eosinophils atypical lymphocytes 2%. Platelet count was 42,000 per cmm. Prothrombin time was over 100%, PTT was normal at 27 seconds; SGOT was 15 units, BUN 10 mg, total protein 6.7 gms; serum protein electrophoresis was normal; cryoglobulin was negative, as was the ANA and the L.E. prep. Nitroterazolium blue dye reduction test (NBT) was 67% (normal 90% to 100%).

She was given prednisone 80 mg a day and the dose gradually reduced and stopped 16 days later. The platelet count rose to 67,000 the fourth day after prednisone was started and was 61,000 when prednisone was stopped. In 1986, at the age of 34, she became pregnant. Her platelet count was 26,000 and after three weeks of prednisone 30 mg a day started about three weeks before delivery, her platelet count increased to 35,000. She delivered vaginally. The infant scalp platelet count was 259,000.

Her paternal uncle M.S., a sheet metal worker, was first seen

at the age of 50 in 1972 for bruises of two weeks' duration. He had had nosebleeds in childhood. At age 35 he had surgery on a fistula-in-ano. Physical exam revealed bruises over his chest and abdomen. CBC revealed WBC 5850/cmm, hemoglobin 17 gms, platelet counts in the 26,000-66,000 range. Sternal bone marrow examination revealed a cellular marrow and increase in megakaryocytes. The clinical impression was chronic idiopathic thrombocytopenic purpura (ITP). Steroids were recommended, but he was lost to follow-up until 1978, at age 56, when he was seen for hemoptysis of one week's duration.

CBC revealed WBC of 6700, hemoglobin 14.7 gm, platelet count 27,000, prothrombin time 89%, PTT normal at 20 seconds, thrombin time at 7 seconds, serum creatinine 0.9 mg, RA latex test negative, L.E. prep negative. Sternal bone marrow revealed a normal cellular marrow and normal numbers of megkaryocytes. He was given steroids and 10 units of platelets with rise in platelet count to 89,000.

A splenectomy was done on Jan. 31, 1978. The spleen appeared grossly normal, weighing 152 grams, with scattered prominent Malpighian corpuscles; the vessels in these areas showed prominent hyalinization. The red pulp showed many neutrophils in the sinuses and also infiltrating the adjacent areas. An accessory spleen measuring 2 x 1.3 x 1.2 cm was also removed and sections of the accessory spleen revealed similar histology.

On Feb. 5, 1986, the platelet count was 29,500. He was seen again at the age of 60, in 1982, for angina pectoris. The TST test was positive. Cardiac catheterization revealed two vessel disease. Platelet count was in the 63,000-67,000 range. Bleeding time was one minute (normal). A five-vessel coronary artery bypass was performed. The post-operative platelet count was in the 50,000-69,000 range. Giant platelets were not seen in either the niece or the uncle.

The family tree for the niece and her paternal uncle is shown in Figure 1. Platelet counts are not available for other family members.

Discussion

Hereditary thrombocytopenia (HT) cases appear to be a heterogenous group with many varieties.¹⁻⁶ In many, abnormal platelet morphology and function are found in addition to thrombocytopenia. These variants include Bernard-Solier syn-

(Continued on page 59)

Accepted for publication January 1987

*Professor of Medicine
University of Hawaii School of Medicine

(Presented at the St. Francis Hospital
Hematology Conference July, 17, 1986,
Honolulu, Hawaii)



High Performance from Pacific Basin Investments

109.3%

NOMURA PACIFIC BASIN FUND

- 109.3% return for shareholders since the fund's inception.*
- Experienced professional management by Nomura Capital Management, Inc., an affiliate of The Nomura Securities Co., Ltd., the world's largest securities firm.
- The Fund's objective is long-term capital appreciation of investments in the emerging economies of Pacific Basin countries.
- No sales charge.
- No redemption charge.
- \$20,000 minimum investment.

* Total return (July 8, 1985 to August 31, 1986) based on change in share price, reinvestment of dividends and capital gains distributions. Favorable currency exchange rates during this period contributed significantly to the total return. Past performance is no guarantee of future results.

For more information about the Fund, including charges and expenses, call the number below or mail the coupon for a free prospectus. Read the prospectus carefully before investing or sending money. Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.

 **NOMURA**
(808) 538-3837
Persons-in-charge:
Call Sharon Kaya or Russell Oki



NOMURA SECURITIES INTERNATIONAL, INC.

Honolulu Office: (808) 538-3837

Persons in Charge: Sharon Kaya & Russell Oki

1001 Bishop Street, Pacific Tower, Suite 2760, Honolulu, HI 96813

Please send a prospectus detailing the Nomura Pacific Fund, Inc.

Name _____

Address _____

City _____

State _____

Zip _____

Business phone () _____

Home phone () _____

Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.
Member SIPC

HMI

**You don't need
the biggest.**

You need the best.



Medical Insurance Exchange of California

**Professional Liability Exclusively
Owned by its insured doctors**

6250 Claremont Avenue, Oakland, California 94618-1324

Call MIEC's Honolulu Claims Office, 545-7231, or call toll-free 800-227-4527

(Continued from page 56)

drome, Wiskott-Aldrich syndrome, Thrombocytopenia with absent radius, May-Hegglin anomaly, Alport's syndrome, Mediterranean Macrothrombocytopenia, Thrombopoietin deficiency (Schulman), Gray Platelet syndrome, Montreal Platelet syndrome and a group referred to as "Families with a clinical picture closely resembling ITP, Familial Chronic Thrombocytopenia with platelet auto-antibodies, Chronic ITP — a familial immunodeficiency syndrome, Familial ITP, Hereditary auto-immune TCP and Hereditary Isolated Thrombocytopenia."

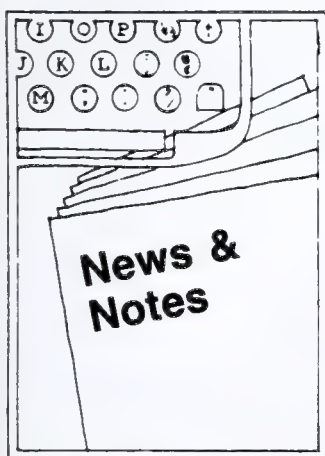
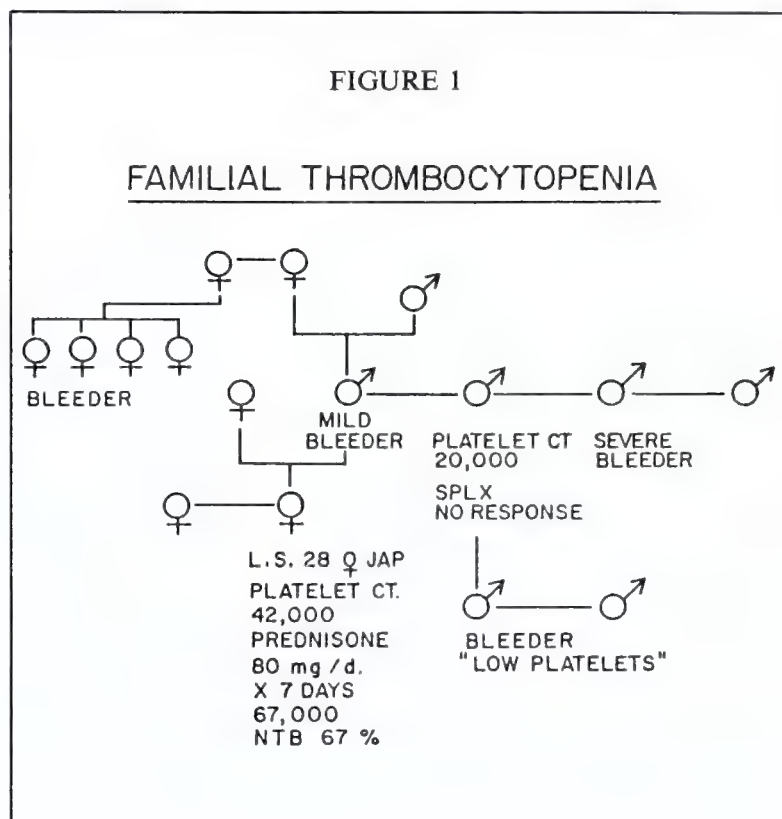
Production of bone marrow platelets may be normal or decreased. Platelet survival may be normal or decreased. If platelet function is abnormal or platelet antibodies found, platelet survival is decreased. Clinical bleeding is common in early years and may be minimal or severe (fatal). A family history of thrombocytopenia is usually present. The etiology for HT is unknown. The inheritance pattern is variable, it may be autosomal dominant, or recessive, or X-linked. No specific therapy is known to be effective. Response to steroids is inconsistent, may be poor or minimal or partial. Splenectomy may be ineffective, partial or it may be beneficial. In this case, the slight response to steroids in the niece in 1980 and during pregnancy suggests HT of the chronic ITP type with a familial or hereditary background.

Reduction of the nitroterazolium blue dye reduction test in the niece appears to be a separate genetic defect in leucocyte function.

REFERENCES

1. Evans RS, Duane RT: Acquired Hemolytic Anemia: I. The Relation of Erythrocyte Antibody Production to Activity of the Disease. II. The Significance of Thrombocytopenia and Leukopenia, *BLOOD*: 4:1196, 1949.
2. Harms D, Sachs V: Familial Chronic Thrombocytopenia with Platelet Antibodies, *Acta Haemat*: 34:30, 1965.

3. Murphy S: Hereditary Thrombocytopenia, *Clinical Hematology* 1:359, 1972.
4. Stuart JJ, Tomar RH, Miller ML: Chronic Idiopathic Thrombocytopenic Purpura: A Familial Immunodeficiency Syndrome? *JAMA*: 239:939, 1978.
5. Karpatkin S, Fortino M, Winchester R: Hereditary Autoimmune Thrombocytopenic Purpura: An Immunologic and Genetic Study, *Ann Int Med*: 94: 781, 1981.
6. Bogart L, Wittels EG: Idiopathic Thrombocytopenic Purpura In Two Elderly Siblings, *Arch Int Med*: 145:2259, 1985 (Dec).



HENRY YOKOYAMA, MD

Medical Humor

A fellow passed on and went to Heaven . . . He had been a good man, paid his taxes, did not drink or carry on with women . . . He reached the Pearly Gates and hailed St. Peter, "Here I am!"

St. Peter looked over his roster and de-

clared, "You are not on my books."

"But I was a good man."

"Sorry, but you must be expected down there," said St. Peter and pointed to the down elevator . . .

The man was thunderstruck, but he obediently took the elevator down to the gates of Hell where Lucifer sat before his Wang computer (which confirms my feeling that the computer is a tool of the devil). Lucifer punched in the man's name, but he had no information on him.

"You aren't supposed to be here . . . Go back up."

The poor unwanted good man once again stood before St. Peter . . .

"You here again?"

St. Peter rechecked his roster and made an amazing discovery . . . "You aren't supposed to be here for another six months . . . Were you by any chance on chemotherapy?" (As told by Dennis Meyer at a Pfizer-sponsored dinner lecture, "Hypertension, Update.")

Life in These Parts

The Coast Guard and some experts still doubt that building the H-3 freeway near the Omega Station in Haiku Valley is safe . . . Frank Tabrah of the Cancer Research Center wrote to the Senate last year that "There's still convincing evidence that running the H-3 through the Omega system could constitute a significant health hazard to both construction workers and to users of the valley."

Honolulu dermatologist Ricardo Mandojana has co-produced a film titled "The Last of the Right Whales" . . . The documentary details the behavior of a young whale in its own undersea world off the Argentina coast . . . Ricardo has more than 20 years' experience exploring the Peninsula Vales and a special interest in marine mammals . . .

Hawaii's first state-operated hospice was dedicated in September at Mahelona Hospital in Kapaa . . . Neal Sutherland is hospice chief.

In September, Third Circuit Court Judge Ernest Kubota dismissed a suit by Hilo resident Betty Lau against Hilo physician Paul

Matsumoto who had diagnosed her as having an acute PID in 1982. Paul, who was still stuck with \$20,000 in legal fees and court costs, says that suits without merit raise the total cost of health care for other patients and drive up the cost of malpractice insurance. Paul will file a motion to recover legal fees and hopes the courts will begin to assess plaintiffs who file suits without merit for the legal costs . . . Lau had filed a similar suit against John Uehara, which was summarily dismissed by Circuit Judge Shunichi Kimura . . .

In August, Marian Melish, principal investigator of a UH/Kapiolani medical team researching Kawasaki Syndrome since March 1984, announced the effectiveness of high doses of gamma globulin IV during early stages of the illness . . . The frequency of coronary artery abnormalities is reduced from 17% to less than 5%. Kawasaki Syndrome is the most common cause of heart disease among Hawaii's children and 350 cases have been diagnosed here in the past 14 years . . . In Japan, more than 70,000 cases have been found since 1971 . . . Japanese and Korean children are most susceptible and children between 2 weeks and 10 years are susceptible. Half the cases involve children under age 2 and 80% under 4. The disease mimics other childhood diseases such as strep throat, scarlet fever, and other viral diseases and causes severe mood swings and also affects the skin, joints, liver, brain, eyes, and lymph glands.

Life Foundation's David McEwan feels that we will have 100,000 cases of AIDS in Hawaii in five years if nothing is done about prevention . . . Efforts to educate the public are crucial because people infected today may show no symptoms for two to seven years . . . Most people with full-blown AIDS are too ill to have sex . . . The greatest danger is sexual contact or sharing needles with people with AIDS-related conditions and who are antibody positive and asymptomatic . . . We do have a "vaccine" — it's called a condom. It should be available in every public restroom, every bar, every restaurant and hotel . . . I am convinced from my practice that it is possible for a man or woman to contract AIDS during a single unprotected encounter . . .

Miscellany

A doctor, a minister, a doctor-lawyer, and a backpacker are on a plane . . . The pilot announces gravely, "Sorry folks, but I have good news and bad news . . . first the bad news: The plane is going down . . . The good news is that we have at least three parachutes on board . . ."

The doctor immediately grabs one of the parachutes, saying: "I shall take this parachute . . . I'm a doctor and I'm invaluable to society . . ."

The doctor-lawyer: "I'm the most brilliant and indispensable . . . Even doctors listen to my advice . . . I'll take that second parachute . . ."

The minister says to the backpacker, "I'm a man of God . . . I've served my time on earth . . . You take the last parachute . . ."

The backpacker reassures the minister . . .

"Don't worry, the brilliant, indispensable doctor-lawyer just took off with my backpack . . ." (As told by doctor-lawyer Bill Goebert at a QMC conference.)

Life in These Parts II

Yone Miyashiro of the Garden Island Medical Group wrote on treating sprains and strains in the "Garden Isle" and used the interesting acronym RICE (Rest, ice, compresses, elevation) . . .

During a Big Island council meeting on the proposal to ban smoking in most retail stores, Hilo pulmonologist Ben Ono testified that "It's time for lawmakers to reverse the burden to the smoker . . . This is a good first step that is long overdue . . ."

Charles Morin of Kawaihae writes in the "West Hawaii Today" that the per capita number of suits and the inflation-adjusted awards have not changed over the years. He compared his physician-owned, not-for-profit company, which has accumulated assets of \$115 million in the 125 months of operation, with the for-profit insurance business, which claimed a annual loss of \$3.4 million (i.e. \$21 million of net premiums and a \$24 million loss) . . . Charles agrees with former Gov. George Ariyoshi who had suggested that the insurance business should be even more highly regulated (i.e. enormous premium reserves should be unnecessary in large companies where re-insurance is common) . . . Charles cautions against tort reform as the major thrust in solving the crisis . . .

Three years ago, former medical examiner Charles Odom showed a group of startled, cringing city council members the overcrowded city morgue where bodies were stacked like cordwood in a small walk-in cooler and more stored in a refrigerated cargo container . . . Last year Charley resigned because of the frustration and the difficult working conditions at the morgue . . . As a result, a new \$3 million morgue is under construction . . . Alvin Omori, the new medical examiner commented, "Probably the most important thing is that now people won't feel as bad about having to come down to identify a relative . . ."

One of the biggest social welfare headaches for Ariyoshi during his three-term tenure was the explosion in Medicaid costs from \$39 million a year to \$175 million plus . . .

Congress recently allocated \$1.5 million to improve the health conditions in the Pacific islands. Under this program, the University of Hawaii School of Medicine is expected to increase its role in training Micronesian medical and health personnel . . .

QMC has formed the Queen's Cancer Institute to consolidate its many cancer-related services. Chief of Oncology Niranjana Rajdev says a governing body of physicians, medical center staff, and community representatives will be designated to oversee the new institute. Executive director will be Luana Lamkin, former director of surgical services . . .

A 17-physician volunteer group left Hono-

lulu for a 12-day special Aloha Medical Mission to help the children of Negros Island in southern Philippines . . . The physicians included Ramon Sy, Erlinda Cachola, Fortunator Elizaga, Gildo Soriana, Claude Caver, Amelia Jacang, Fred Pacpaco, Ernesto Espaldon, Letty Espaldon, Charles Carroll, Geoffrey Davis, George Plechapy, Remedios Sonson, Mario Bautista, and Daniel Ponce. The mission, carrying \$1 million worth of donated medical supplies, hopes to perform as many surgeries as possible and immunize the children against mumps, measles, whooping cough, and polio . . .

Miscellany

A fellow had a tiring day at the office and stopped off at a neighborhood bar for a quiet drink . . . A Jew and a Chinese were also drinking quietly . . . Suddenly the Jew walked over to the Chinese and punched him . . . The Chinese picked himself up and asked, "What was that for?"

"That's for Pearl Harbor."

"Hell! I'm Chinese, not Japanese."

"Chinese, Japanese, Korean, Vietnamese, they all look alike to me."

They both went back to their drinking . . . After a few more drinks, the Chinese got up, walked over to the Jew and walloped him . . .

The Jew got up slowly, "What's that for?"

"That's for the Titanic!"

"But the Titanic was sunk by an iceberg . . ."

"Iceberg, Goldberg, Isenberg, Greenberg, they all the same to me . . ." (As told by our favorite Dista rep John Howitt.)

☆☆☆

Two elderly ladies on their rocking chairs were reminiscing about their late farmer spouses . . . "When your husband was alive, did you have mutual simultaneous orgasms?" one asked . . .

A moment of silence as the other lady thought back . . . "No," she finally replied, "I think we had State Farm . . ." (As told by both Ralph Cloward and Francis Oda.)

Elected, Honored & Appointed

The Hawaii chapter of American College of Emergency Physicians elected Wesley K.W. Young president; James Walker president-elect; Mark Schmaiz secretary; and James P. Gardner treasurer . . . Dick Mamiya, Hawaii Heart Association president since 1984, was succeeded by David Fergusson . . . Richard Lee Ching of Hilo, Darcel Sue Gilbert of Lahaina, and James Donovan of Kihei were recertified by the ABFP . . . Also recertified were Eric Yee and Robert Conrad of Waimea, Kauai . . . Leonard Hiroshi Sakai of Maui was elected a fellow of the American College of Surgeons during the college's 72nd Annual Clinical Congress in New Orleans . . . Cardiologist Djon Indra Lim with the Hilo

Medical Group was elected a fellow of the American College of Physicians . . . Straub radiologist Virgil Jobe was awarded a fellowship by the American College of Radiology's Board of Chancellors . . . Retired Kauai OB-Gyn man Patrick Aiu, who sails on the Hokulea, was promoted to colonel in the Hawaii National Guard. Patrick is battalion surgeon for the 1st Battalion, 299th Infantry . . .

Straub Clinic was featured in the September issue of "Post-graduate Medicine" with 12 articles contributed by Straub physicians . . . David Fitz Patrick and co-authors Jim Navin and Bert Fukunaga reported on fine needle aspiration of thyroid nodules based on a 30-month study of 186 cases . . .

In December, the Hawaii Heart Association announced the following project grants to physicians Edward Beckman, \$20,000, John Hardman \$6,598; Irwin Schatz \$10,000; Marion Melish \$20,000, and Shoji Shibata \$12,536 . . .

Entrepreneurs

Rick Williams, fertilization specialist and program director of the Sex Selection Center (located at his KWCMC office) has invested \$25,000 in the Ericsson Method for gender preselection . . . Rick says hundreds of babies are born through sex-selection clinics, (35 in the U.S. and others in foreign countries including Egypt, India, Pakistan, and Taiwan.)

The Liliha Medical Center at 1714 Liliha St. was purchased by a physician group, 1714 Associates, for \$2.6 million from project de-

velopers Valentine Peroff Jr. and Patrick Hart . . .

Miscellany

Aristotle advised making love in the north wind for a male child, and in the southwind for a female . . .

Hippocrates, the father of medicine, prescribed tying a string around the right testicle to stimulate production of male seeds, around the left for a daughter . . . (From Star-Bulletin reporter Lucy Young's article on the Ericsson Method of Sex Selection.)

Sportsmen

The 1986 HMA/HCMS Golf Tournament was held on Oct. 8 at the Hawaii Kai Golf Course where 80 players hacked away . . . When the dust had settled, 1985 HCMS winner Ron Perry had shot a net 63 to again win the Robert Miyamoto Perpetual Trophy (for low net); Ike Nadamoto had also shot a net 63 to win the Honolulu County Society trophy. Don Maruyama shot a gross 75 to win the John Felix Perpetual Trophy (for low gross) and Schering rep John Hee with net 62 won the George Mills Individual Trophy for Pharmaceutical Reps . . . Women's low net was posted by Emi Tamura (71) . . . clustered at net 64 were the trio of Coolidge Wakai, Tad Iwamura, and Bill Dang . . . And net 65 were Don Maruyama, Al Ho, Roy Iritani, Clive Ostuka, and Cleo Froiex . . .

The Waiialae Member-Guest Day on Saturday, Oct. 25, was a team best ball event . . .

Again the name Ron Perry pops up as a winner . . . Ron and partner shot a fantastic net 56 to win first prize . . . At net 57 and second place was the incredibly lucky team of Francis Oda and H. Yokoyama . . .

The KMC relay team of Osamu Fukuyama, Owen Kaneshiro, et al. ran the MPRRC 30-Mile Relay on Aug. 24, 1986, with a time of 3:30:48.0 and a pace of 7:02. Osamu ran his six miles in 38:40 or 6:44 per mile while Owen's time was 42:11 or 7:03 per mile . . . The team placed first in Division 5; sixth in Mixed and 25th in Overall . . . Owen at age 41 says his time was the best of his running career and with less training, (which proves true Jack Scaff's contention that the second-fastest group are men between ages 40 to 45 . . .) *Hole-In-Ones:* June apparently is a good month for veteran golfer Joe Nishimoto . . . He had his first hole-in-one in June 1981 on the eighth hole at a WCC tournament . . . (He had the use of a Toyota Supra for a year.) His next hole-in-one was on the WCC second hole in June '82 and his last in June '83 on the 13th hole. Some lucky June, he hopes to hole-in-one the WCC 16th hole . . . Tennis playing golfer Tommy Chang has had his hole-in-ones on the WCC second, eighth, and 16th holes . . . but alas not the 13th . . .

At the KWCMC Golf Tournament at Leilehua, Bristol drug rep Stan Teruya, who plays about once a year, shot a net 59 with his 36 handicap . . . Stan was so stunned and happy he promptly donated his winnings to the hospital . . .

THE MOST PRECIOUS
COMMODITY OF ALL.

Time.
What you do with it
is your business.
Helping you make the most of it
is ours.

**Honolulu Cellular
Telephone Company**

Hawaii's world-class cellular system operator.
1161 Kapiolani Boulevard Honolulu, Hawaii 96814 Ph. 545-4765

*Did
you
know?*

Saint Francis Medical Center is one of the top three hospitals in Hawaii . . . and the fastest growing.

Leaders in quality health care.

Serving people of all faiths, beliefs, or ethnic backgrounds.



Saint Francis Medical Center

Discover the Difference



Over the Editor's Desk

STEPHEN R.P.K. BRADY, MD

GENERIC DRUGS NOT ALWAYS BEST BUY—CHICAGO—Although consumers generally pay less on average for generic drugs than name brands, "buying generic" doesn't always guarantee the lowest price, reports a study in a recent issue of the *Journal of the American Medical Association*.

In fact, the study by Bernard S. Bloom, PhD, of the University of Pennsylvania, and colleagues, finds wide price variation within and among pharmacies and says "an important number of individual consumers" pay more for generics than name brands. This occurs, the study finds, even though the generics cost pharmacies less than comparable name brands.

The study, testing the common perception that substituting generic drugs for name brands cuts consumer costs, looked at about 892,000 prescriptions written for 21 pairs of branded and generic drugs.

The study found the cost per pill paid by the pharmacy was always less for the generic than the name brand and the price per pill paid by the consumer usually less.

"The consumer is best advised to search for low prices without regard to whether the drug is brand or generic," the study concludes.

In an accompanying editorial, Louis Lasagna, MD, of the Tufts University School of Medicine, Boston, calls the study a "landmark publication" because of its size and scope. The authors show "it is delusional . . . to equate generic prescribing with the achievement of the purposes . . . for such prescribing by all the interested parties," that is, cost savings for consumers, Lasagna says.

CAROTID ENDARTERECTOMY OFTEN INAPPROPRIATE—CHICAGO—Carotid endarterectomy (removal of plaque from the carotid artery) is

CLASSIFIED NOTICES

To place a Classified Notice, call Margie at 521-0021. Four line minimum, approximately 5 words per line. Payment must accompany order.

FOR SALE

50% OFF PREVIOUSLY OWNED medical, laboratory, office, x-ray, ultrasound equipment. We buy, sell, broker, repair, appraise medical equipment. Ask about our Holter Scanning Service. Medical Equipment Resale, Inc. 24026 Haggerty Rd., Farmington Hills, MI 48018; (313) 477-6880.

EMPLOYMENT OPPORTUNITIES

ISLAND FEVER?

Respected Internist desires to switch practices for a short time. Good salary. Good living conditions. Glen Deutsch MD, 410 Division St., Buffalo, MN 55313. (612) 682-3325

PHYSICIANS NEEDED

Occasional assistance in administering physical exams to young men & women applying for the Armed Forces. Hours dependent on number of physicals to be given, but usually 4 to 6 hours. Compensation is \$125 to \$150 daily. No malpractice insurance required. Interested physicians should contact Dr. John Kustermann, 300 Ala Moana Blvd. Rm. 3307, Hon. HI, 96850-0001 Ph. (808) 541-2997.

BUSINESS LOAN

Starting out,
Branching out . . . begin by reaching out to us for that business loan. We'll be there.



Central Pacific Bank
The Art of Service
Member FDIC
Phone—544-0500

often performed when not clearly necessary, reports a study in the *Journal of the American Medical Association*. The study evaluated the appropriateness of 107 such procedures performed on 95 patients in five California Veterans Administration teaching hospitals in 1981.

"Fifty-five percent of the procedures studied were judged clearly appropriate, 32% equivocal, and 13% clearly inappropriate," says Nancy J. Merrick, MD, MSPH, of the Veterans Administration Medical Center, Wadsworth, Calif., and colleagues. The rate of serious operative complications was 5.6%.

"Appropriate was defined to mean that the expected health benefit (eg., increased life expectancy, relief of pain, reduction in anxiety, improved functional capacity) exceeded the expected negative consequences (eg., mortality, morbidity, anxiety of anticipating the procedure, time lost from work) by a sufficiently wide margin that the procedure was considered worth performing," the researchers say. They add that their study highlights the importance of critically assessing the appropriateness of common surgical procedures, especially among the elderly, who may have higher risks for serious complications.

LITTLE-RECOGNIZED HEART RISK FACTOR NEEDS GREATER ATTENTION, STUDY REPORTS—CHICAGO—A report in the *Journal of the American Medical Association* says a cholesterol-carrying lipoprotein called Lp(a) appears to be an important but little-recognized predictor for coronary heart disease, and may be especially useful in assessing younger people for long-term heart risk.

In fact, says the report by George G. Rhoads, MD, MPH, of the National Institute of Child Health and Human Development, Bethesda, Md., and colleagues, Lp(a) may be "the most important known genetic trait affecting the development of (coronary heart disease) . . . but has received surprisingly little attention."

Lp(a) was discovered in 1963. It is structurally related to cholesterol-carrying low-density lipoprotein (LDL), a well-recognized coronary risk factor, but is found in lower plasma concentrations. Lp(a) has been found in atherosclerotic plaque and has been reported to be associated with heart disease in several studies involving whites.

To test whether Lp(a) is a general risk factor, Rhoads and his colleagues measured serum Lp(a) in 303 Hawaiian men of Japanese ancestry with prior heart

PHYSICIANS

**Your Army Reserve Personnel Counsellor
would like to talk to you about the following
opportunities in the US Army Medical Department**

- **PART-TIME INCOME**
- **RETIREMENT POTENTIAL**
- **POST EXCHANGE PRIVILEGES**
- **INSURANCE DISCOUNTS**
- **CONTINUING MEDICAL EDUCATION**
- **ATTENDANCE AT AMA CONFERENCES**
- **TRAINING AT U.S. ARMY HOSPITALS**
- **ALL PAID FOR BY THE US ARMY RESERVE**



MAJOR PATRICIA S. SCHACKLETON, MSC
Building 1801
Presidio of San Francisco
CA 94129-1161
415-751-1616

**Many groups TALK about building a better America—
The Army Reserve WORKS at it.**

Honolulu Orthopedic Supply

**ORTHOTICS
PROSTHETICS
MASTECTOMY FITTINGS
ORTHOPEDIC SHOES
WHEELCHAIRS
WALKING AIDS
536-6661**

1365 Nuuanu Avenue • Honolulu, Hawaii 96817

MEMO

TO: ALL DOCTORS
FROM: PEQEX

Do you need assistance in obtaining a specialty medical product?

Would you be interested in saving on quality medical and surgical products?

Are you planning to set up a medical office or clinic?

Let **PEQEX, Inc.** be your answer, Call 537-2724

Representing:

BEAVER • BURTON • DETECTO • PYMAH
CARING • DAVIS & GECK • MILTEX • PEDIGO
JOERNS • GRAHAM FIELD & MANY OTHER COMPANIES

PHYSICIANS EQUIPMENT EXCHANGE, INC.
PEQEX, INC.

(808) 537-2724

831 Pohukaina St., #C-3 Honolulu, Hawaii 96813



O.P.T.I.O.N. Care® of Hawaii
A Home IV and Nutritional Service

WE'RE THE LEADER IN INTRAVENOUS HOME CARE.

WITH 96 OFFICES, NATIONWIDE, IT'S NOT OUR FIRST TIME OUT. SPECIALLY TRAINED CLINICAL PHARMACISTS, EXPERIENCED RN I.V. THERAPISTS, SERVICE AND CLINICAL DATA FROM ONE SOURCE, TIMELY AND ACCURATE REPORTING, AND 24 HR. AVAILABILITY SETS US APART FROM THE CROWD!

WE HAVE THE SOLUTION FOR YOU®

For More Information

CALL 254-5841

Pali Palms Plaza 970 N. Kalaheo Ave. Suite C-106 Kailua, Hawaii 96734

attacks, as well as in 408 population-based controls. Increased risk of heart attack was shown mainly for men at the higher range of serum Lp(a) levels recorded (greater than 20.1 mg/dl), with younger men (under age 60) having the highest relative risk. The association with heart attack couldn't be explained by differences in total cholesterol, high-density lipoprotein, LDL, smoking, alcohol consumption, systolic blood pressure or age, the report says.

"Overall, the evidence indicates that Lp(a) . . . appeared to be an independent predictor of coronary risk," they conclude.

NEW SELF-REPORTING SCALE FOR DIAGNOSING MAJOR DEPRESSION—

A study in November's *Archives of General Psychiatry* describes a new self-reporting scale for diagnosing major depressive disorder (MDD). Mark Zimmerman of the University of Iowa College of Medicine, Iowa City, and colleagues, say the scale, the Inventory to Diagnose Depression (IDD), "may be particularly useful in light of the recent evidence that American psychiatrists continue to underdiagnose depression and overdiagnose schizophrenia." The IDD consists of descriptive statements about mood, appetite, etc., designed to gauge MDD symptoms by asking patients which statements apply most closely to them. Good correlation is reported between IDD assessment of inpatients and a clinician's diagnosis of MDD.

BENIGN SEXUAL HEADACHE

—Specialists are increasingly recognizing the existence of benign sexual headache, a disorder occurring during sexual activity but not reflecting a serious underlying medical problem, reports a study in November's *Archives of Neurology*.

The exact incidence of the problem is hard to gauge, since many patients fail to seek medical care and many physicians still don't recognize the disorder. However, Johns says, most cases appear to respond to drugs or muscle relaxation therapy.

CIS INAUGURATES SMOKERS COUNSELING PROGRAM—

Help is now available for smokers trying to quit the habit. The Cancer Information Service (CIS) has started a Quit Smoking Counseling Program to answer telephone questions about how to quit smoking. Trained counselors are on duty weekdays from 8:30 a.m. to 4:30 p.m. at 524-1234. Neighbor Island residents can call collect.

Callers can also request a free Quit Smoking Kit containing helpful hints on how to stop smoking.

Based on a program developed jointly by the National Cancer Institute and the U.S. Public Health Service, the CIS uses specially trained counselors to answer caller's questions. Counselors can answer specific questions on strategies for quitting, symptoms to expect after quitting, how to stay off of cigarettes as well as the effectiveness of various quit smoking programs being offered locally.

From the Cancer Communications System, Cancer Research Center of Hawaii, 1236 Lauhala St., Suite 502, Honolulu.

Book Review

Manual of Clinical Problems in Pulmonary Medicine R.A. Bordow, MD, and K.M. Moser, MD, 492 pages, Little, Brown Co., Boston, Toronto, 2nd Edition, 1985, \$18.95.

One could not consider this a stylish book — from the garrish figure on the cover to the funeral-like heavy horizontal bands throughout the text. Furthermore, there is a certain unattractiveness about its sparseness — the tiny print, the tiny margins, the print and diagrams that show through from the reverse of the page, etc. This all seems to be done with a certain perverseness in that the same style persists even next to a page and a half without print.

Should one persist, however, one can recognize the good value. the content is wide ranging and well focused. The pulmonary function section is particularly well balanced. Thus, the influence of race on normal pulmonary function values is noted, a factor of considerable importance to us in Hawaii. The place of body plethysmography is well described and the fallacies of the single breath diffusing capacity commented upon. In asthma, the specificity of bronchial provocation testing, especially with antigens, is emphasized. An inexpensive, desirable book.

Douglas G. Massey, MD
Professor of Medicine

Tax-free plus!



Call today!

HAWAIIAN TAX-FREE TRUST

A mutual fund for Hawaii residents investing in tax-exempt municipal obligations providing income tax-free from State of Hawaii and Federal income taxes.*

PLUS

- **Strong Stability of Capital**** - through continuous portfolio supervision with diversification, varying maturities, and select quality
- **Low Initial Investment** - \$1,000; no minimum for additional investments
- **Income Compounding** - through automatic dividend reinvestment
- **Daily Liquidity** - at the then current net asset value, by telephone or mail; no penalties or redemption fees
- **Frequent Statements and Reports** - with every investment, withdrawal and dividend reinvestment, plus annual audit

FOR INFORMATION

Contact Your Local Investment Broker

OR CALL

1-800-228-4227

TOLL-FREE FROM HAWAII 7 DAYS A WEEK, 24 HOURS A DAY

Aquila Distributors, Inc., 200 Park Avenue, New York, NY 10017

You will be sent free descriptive material and a prospectus containing more complete information including management fees and expenses. Read carefully before you invest or send money.

INVESTMENT ADVISOR

Hawaiian Trust Company, Ltd.

A Trust and Investment Company of

Bancorp Hawaii

*Under certain circumstances, some income may be subject to State and Federal Tax.
**Share net asset value is not fixed and varies with interest rate fluctuations.

If you do business in Hawaii . . .

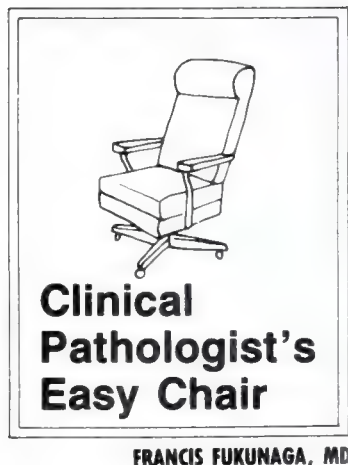
and want to keep on top of civil cases in our courts, or tax liens, public hearings, incorporations and partnerships, or almost anything else of value in your practice

. . . we have news for you



PACIFIC BUSINESS NEWS

For information call 521-0021.



Epstein-Barr Virus (EBV) Infection

Epstein-Barr virus (EBV) infection in man is an almost inevitable event. The great majority of infections are inapparent and most people in the world develop antibodies to the virus. The infection in early childhood is usually asymptomatic or only mildly symptomatic but infection in the young adult often results in infectious mononucleosis. The reactivation of the latent EBV infection leads to the persistent illness complex called chronic infectious mononucleosis or chronic EBV infection.¹ Chronic mononucleosis is characterized by a prolonged clinical course of months to years with elevated values of EBV specific antibodies. Other diseases attributed to EBV infections include the African type Burkitt's lymphoma, nasopharyngeal carcinoma, lymphoproliferative lesions including lymphomas in renal transplant recipients, some neurologic diseases such as Bell's palsy and some cases of thrombocytopenia and aplastic anemia.

The least expensive tests should be done for the diagnosis of infectious mononucleosis such as those for heterophile antibodies. The heterophile antibody response is seen in 80% to 90% of adults and children but in less than 50% of children below age four years.² It is not an antibody to EBV antigen and is called heterophile antibody because it is formed in one animal species and cross reacts with antigens present in another species such as sheep and horse. Tests for specific antibodies to the EBV antigens can be used in cases where the heterophile antibody response is absent and in patients who show only a few manifestations of infectious mononucleosis.

The Epstein-Barr virus is a member of the herpes virus group and has a predilec-

tion for the B-lymphocytes. The virus can be maintained by a continuous culture of lymphoblasts.³ It may transform lymphocytes to lymphoblasts in vitro, indicating an oncogenic potential. The virus has several distinct antigens (viral capsid, early antigen, and nuclear antigen) that provoke their corresponding antibodies. The response pattern of these antibodies provides a clue that would suggest an acute primary, reactivated, convalescent, or an old EBV infection.

All acute EBV infections are characterized by antibody response to the Viral Capsid antigen (VCA). (The capsid is the protein coat of a virion.) The IgM-anti-VCA declines rapidly and usually is not detectable at 12 weeks but the IgG-anti-VCA persists indefinitely. The IgG-anti-VCA, therefore, indicated recent or remote EBV infection.

The early antigen of EBV has two components, the diffuse (D) and restricted (R), designed on the basis of their immunofluorescent reactions. Childhood infection usually shows the "R" while adult and adolescent infections show the "D" pattern. Anti-EA is usually produced acutely at the same time or shortly after the production of anti-VCA and lasts only 8 to 12 weeks, similar to the IgM-anti-VCA. However, a few individuals may have the anti-EA antibody without recent infection such as some cases of lymphomas, leukemias, nasopharyngeal carcinomas, and AIDS.

The antibody to the nuclear antigen (anti-EBNA) usually develops two to three months after the acute infection and persists indefinitely, like the IgG-anti-VCA. Detection of anti-EBNA,

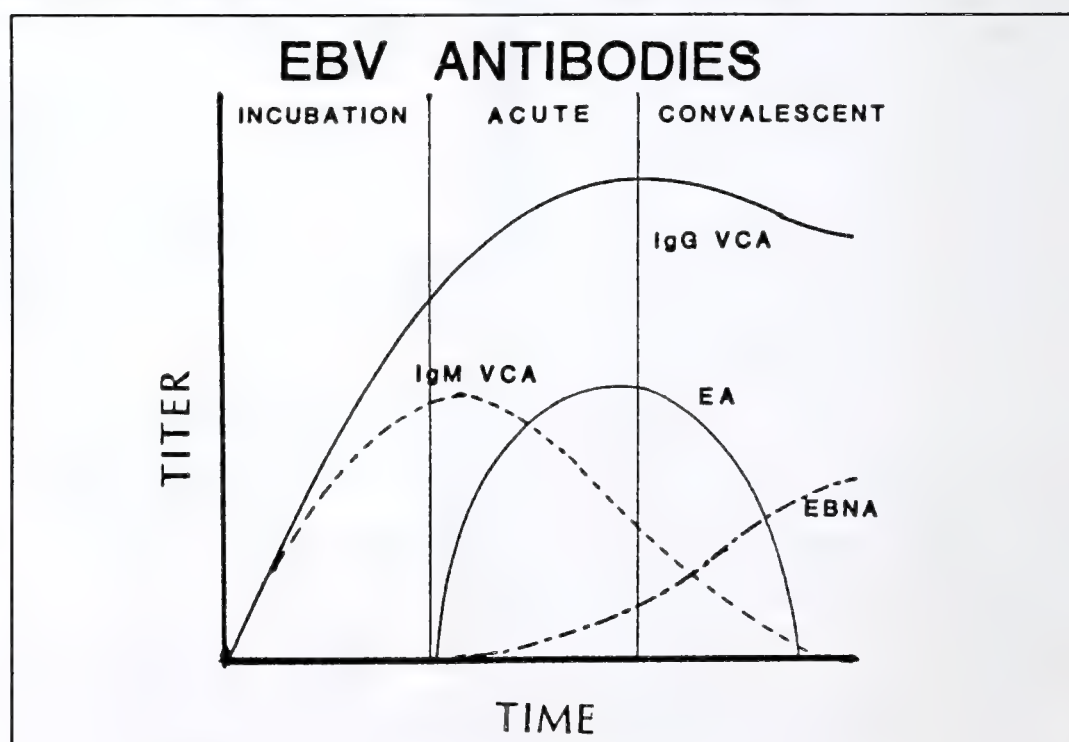
therefore, indicates infection at least a month to years in the past.

Quiescent EBV infections are characterized by the absence of the IgM-anti-VCA antibody and the presence of moderate titers of the IgG-anti-VCA and IgG-anti-EBNA and absence or very low titers of anti-EA.

Reactivated EBV infection is believed to come from the latent forms of the virus found in the B-lymphocytes. High titers to the IgG-anti-VCA and anti-EA have been described in patients with Burkitt's lymphoma, nasopharyngeal carcinoma, and immunosuppressed and immunodeficient patients. These high titers probably reflect enhanced EBV activity and possibly reactivation of the latent virus. Occasional transient IgM antibody response to the viral capsid antigens with stable levels of anti-EBNA also suggests a reactivation of the virus. Patients with chronic mononucleosis show increased IgG antibody titers to the early antigen and viral capsid antigens but these two antibodies are also seen in healthy individuals who had an EBV infection in the past. The other antibody responses, IgM-anti-VCA and anti-EA are inconsistent and may be intermittent in chronic mononucleosis.

REFERENCES

1. Merlin TL: Chronic Mononucleosis, pitfalls in the laboratory diagnosis. *Human Path*: 17:2-8, 1986.
2. Sumayi CV: Improved test for EBV IgM antibody utilizing *Staphylococcus aureus* absorption step. *J Infect Dis*: 146:518-523, 1982.
3. Henle W et al: Epstein-Barr virus specific diagnostic tests in infectious mononucleosis. *Human Path*: 5:551-565, 1974.

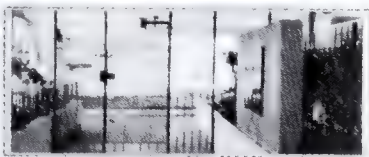


REAL ESTATE OPPORTUNITIES



YACHT HARBOR TOWERS #1907

Super gorgeous 1 bed, 1 bath with panoramic views of harbor, ocean and park. Beautifully upgraded with quality workmanship. Must see to appreciate. \$215,000 firm. (L)



DOWSETT POINT #A-1

Nature's hideaway is a reality in this well designed architecturally beautiful development. Light and airy 1 bed, 1 bath will spoil the executive buyer who is looking for style and quality. Quiet & tranquil area with a view of ocean and mountain. See to appreciate FHA approved. \$107,000 (L)

Call CHU LAN or JOHN SHUBERT (R) FOR SHOWINGS



SHUBERT PROPERTIES INC. 538-3500

1188 Bishop Street, Suite 2801 - Honolulu, Hawaii 96813

MLS

WAIALAE PROPERTIES

WAIALAE BEACHFRONT just below Waialae Iki. Come through the gate and leave the cares of the busy world behind.... Relax in the OCEANSIDE SPA or exercise and enjoy the PADDLE TENNIS COURT. 3 bedrooms, 3 baths and a family room. Home has been re-modeled but retains the charm of a Hawaiian lifestyle. \$450,000 (L)

WAIALAE IKI. The dramatic gallery with a spiral staircase and glass chandelier will delight you as you enter this unique home. Indoor-outdoor living with a swimming pool, patio and sun deck to catch the panoramic ocean views. Oversize master bedroom, 2 other spacious bedrooms, family room and dining room. \$395,000 (L)



Jackie Jones
(R) (CRS)
377-5361

dolman
associates inc.
REALTORS

since 1957

531-6488

VIEW HOMES!

LANIKAI BEACH

a wonderful fee simple property on the ocean, 11,193 sq. ft. presently improved with two bedroom home plus studio. Ideal for executive home, spectacular view. \$595,000.

Audrey Hansen (R) 254-4666

NEW LISTING - Kaneohe Bay
overlooking delightful remodeling details, new kitchen, large master suite with skylight. Tall windows looking out to a magnificent bay view. \$218,000.

Mary Burris (RA) 261-7679

WADE
LTD., REALTORS

25 KANEOHE BAY DRIVE
KAILUA, HAWAII 96734
Telephone 254-3521

MALAEKAHANA BEACH RENTAL



Rent a luxurious 6 bedroom 4-bath home at Malaekahana Bay. This exquisite estate is one of the most beautiful country rentals on the North Shore and is perfect for a two-family vacation. The property can sleep up to 16 people and includes a car, paddle tennis court and outdoor spa overlooking the ocean. Call for brochure: \$250 a day

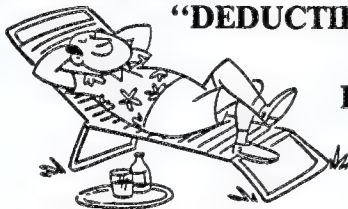
Nancy Bathen (R) 395-4565

HILL & CO.

specialists in fine residential properties

HONOLULU
373-9844

DELECTABLE LIVING IN A "DEDUCTIBLE"



2ND HOME

Waikiki Banyan #2704 - 1 bdrm.
\$124,900 (L)

Ala Wai Cove #102 - 2 bdrm.
\$96,500 FEE

Royal Iolani #3408 - 2 bdrm.
\$215,000 (L)

Hawaiian Prince #217 - 1 bdrm.
\$47,500 (L)

Kuhio at Waikiki #1602 - 2 bdrm.
\$99,000 FEE

Spencer/Sewell Realty, Inc.

1585 Kapiolani Blvd. #1107

(808) 941-0511

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



DIAMOND HEAD APTS

Renovated 2 bdrm/2 bath 1450 sq. ft. Direct oceanfront Fee Simple Co-op apt. (pictured) Preferred floor plan in prestigious Bldg. You can almost see Tahiti from the wrap around lanai! (26437) \$575,000

Bob Keith (RA) 735-6105

COLONY SURF

Choice of Gold Coast Penthouse Studio Co-ops. Direct Oceanfront or Ocean/Diamond Head View. White sand beach! Envisable address with extra amenities! (20534 & 22968) (\$250,000 L & 270,000 L)

Muriel Paterson (RA) 923-7666

Eleanor Jamieson (R) 737-3030

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

MALEKAHANA FEE OCEANFRONT \$220,000

The most perfect half moon bay on Oahu. Secluded and private. Over one acre with several building sites. Owner looking for a partner to help develop. Seller is a likeable young doctor who needs a weekend retreat and willing to share his prize beach.

MT. TERRACE CORNER LUXURY CONDO \$267,000

Enjoy the quiet and luxury of this highly upgraded corner unit. 20th floor with views of mountains, sunrise, Koko Head and Maunaloa Bay. A 2 bedroom professionally decorated by a Beverly Hills designer. Excellent building with finest amenities.

CANTERBURY PLACE FAMOUS "D" UNIT \$197,000

1910 Ala Moana across from Hawaiian Village. 15th floor. Fully furnished. 5 rooms with two lanais. Excellent security and good maintenance. Heated spa and pool plus sauna, paddle tennis and sun decks. Security garage. Largest one bedroom in Waikiki.

Duffy Regan LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 713, Honolulu, Hawaii 96815

FOUR-PLEX

Located in a popular rental area on the North Shore. Walking distance to beach. Near bus. Great for investor who would like a fixer upper. Three 1-bdrm units & One 2-bdrms units \$195,000 Fee

BEACH FRONT CONDO

Haleiwa Surf 2 bdrm, 2 bath, Sandy Beach. \$105,000 Lease

VACANT LAND

Two acres: Mokuleia across from Sandy Beach; Fenced; Sprinkler system; Corner lot. \$195,000 Fee

Four acres Waialua Beach Road. Great for farming. \$221,000 Fee

Marianne Abrigo, Properties

P.O. Box 867, Haleiwa, Hawaii 96712 637-3511

STARK
REALTY

Since 1968... over \$750 MILLION in sales with a tradition of professional service and satisfied clients.

- Condominiums
- Land & Home Sites
- Waikiki
- Homes
- Rentals
- Honolulu
- Investments
- Property Management
- Outer Island

BUYING OR SELLING... CALL US FIRST



944-8744



At Yacht Harbor Towers across from Ala Moana Shopping Center
1600 Ala Moana Blvd. Honolulu, Hawaii 96815

REAL ESTATE OPPORTUNITIES

BRAND NEW LISTING MANOA

Typical old Kamaaina charmer on large level fee lot. The house needs updating but features lovely moldings, wainscottings and a gorgeous staircase. There's a formal dining room, 2 or 3 bedrooms, huge kitchen & basement workshop. The grounds contain many mature fruit trees.

\$340,000

Maggie Parkes
and Associates, Realtors

Aina Haina Shopping Centre, Suite 126
820 W. Hind Drive, Honolulu, HI 96821 • (808) 373-9869

WAIKIKI and INCOME

FEE SIMPLE land under a condominium that provides easy management and a net income to owner. 5,000 sq. ft. in the heart of Waikiki. \$165,000.

Call: Teruo Mori (RA)
735-8008

Century 21®

KAHALA HALE, INC.
4400 Kalanianaʻole Hwy., Ste. C-21
Honolulu, Hawaii 96821
Office: (808) 735-7888



DIAMOND HEAD

Magnificent Ocean Front Estate
on the tip of Blackpoint. Exclusive area of fine homes — a "Carmel-like" community. Fabulous Kahala Bay view. Nearly one acre of land. Cottage on property.

\$3,000,000 (L).....MLS30390

GLORIA FOWLER (R) 734-3744

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

Conley Dew...of Course.



"Gingerbread House." Sturdily constructed, fully restored in Tudor style, listed in Hawaii Register of Historic Homes. Steps away from Gold Coast beach. Two story, 2 bdrm, 2 bath, dining area, den/study. Intimate, cozy, and Fee Simple. \$585,000

Ron Okubo (R) 923-9633

Diamond Head Beachfront Villa. Magnificent home and studio cottage on secluded white sand beach. Landscaped, maintained, secured. \$2,950,000. Fee Simple.

Call Barbara Dew (R) 595-3730

CONLEY DEW

333 Queen St. • Suite 710 • Honolulu, HI 96813
A Real Estate Corporation

(808) 524-2844



Frank E. Ceccarelli, M.D.,
Urology



Susan H. Chapman, M.D.,
Obstetrics/Gynecology



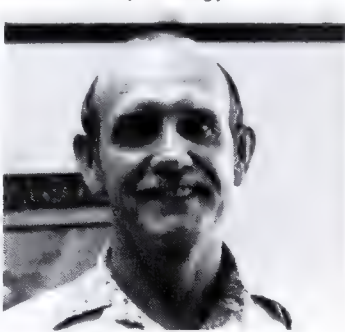
Bernard Fong, M.D.,
Cardiology



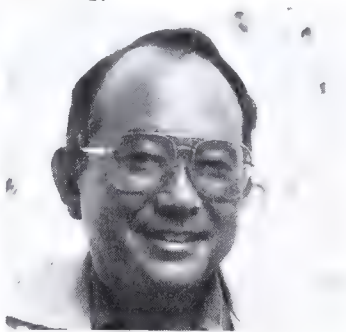
Alvin Furuike, M.D.,
Pulmonology



Thomas Y. Ito, M.D.,
Urology



C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



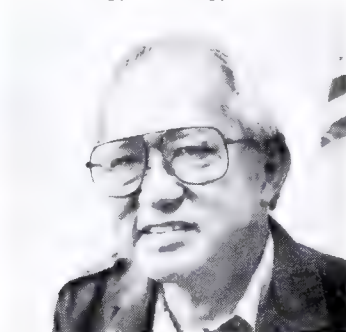
James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



Paul I. Sunahara, M.D.,
Dermatology

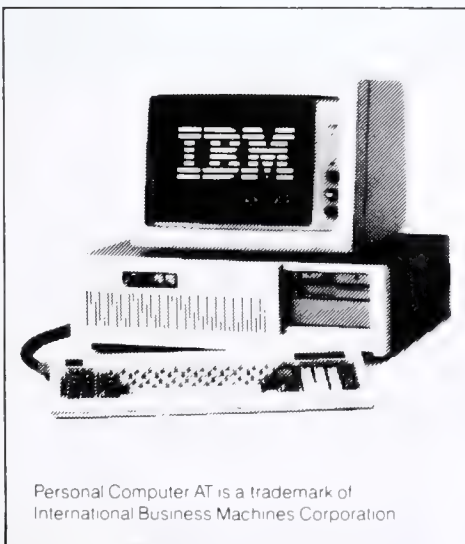


Henry L. Yim, M.D.,
Pediatrics

What do these doctors have in common?

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**



Personal Computer AT is a trademark of
International Business Machines Corporation

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary



Now where there's a phone, there's a loan.

Sometimes, applying for a loan in person just isn't practical. Or possible. But you don't have to be shut-out.

First Hawaiian Bank has gone to bat for you. And introduced an innovative service called Loan by Phone. It's a new, convenient way to borrow from \$1,500 to \$10,000.

All you do is call any branch of First Hawaiian. From anywhere.

We'll ask a few simple questions. You'll give a few simple answers. And then we'll get back to you with

our answer. Fast. (Usually the same day.)

You can use Loan by Phone for almost any kind of consumer loan. And the rates are low, too.

So if applying for a loan in person is inconvenient, just dial any branch of First Hawaiian.

It's always the right call.



FIRST HAWAIIAN BANK

We say yes to you.

Member FDIC

MARCH 1987
VOL. 46, NO. 3

Hawaii Medical Journal

CONTENTS

FROM THE PRESIDENT 76
Walter W.Y. Chang, MD

EDITORIALS: 76
Sad But Necessary
J.I. Frederick Reppun, MD
Victim's Rights
Russell T. Stodd, MD

ERRATUM 79

HMJ HONORS MILTON M. HOWELL, MD 80
J.I. Frederick Reppun, MD

CONTINUING MEDICAL EDUCATION 82

**ANTI-THYMOCYTE GLOBULIN THERAPY OF
HEMATOLOGIC DISORDERS** 85
Joana Magno, MD
Melvyn Kaneshiro, MD
Kris Doney, MD
Jeffrey Nakamura, MD

**OFFICIAL 1985 FEDERATION SUMMARY OF
REPORTED DISCIPLINARY ACTIONS** 92
Dale G. Breden
Bryan L. Galusha, MD

NEWS & NOTES 98
Henry Yokoyama, MD

OVER THE EDITOR'S DESK 101
Stephen R.P.K. Brady, MD





**The best doctors get sued.
We protect you.
We know how.**

Let us tell you how we do it.



Medical Insurance Exchange of California

Professional Liability Exclusively

6250 Claremont Avenue, Oakland, California 94618-1324

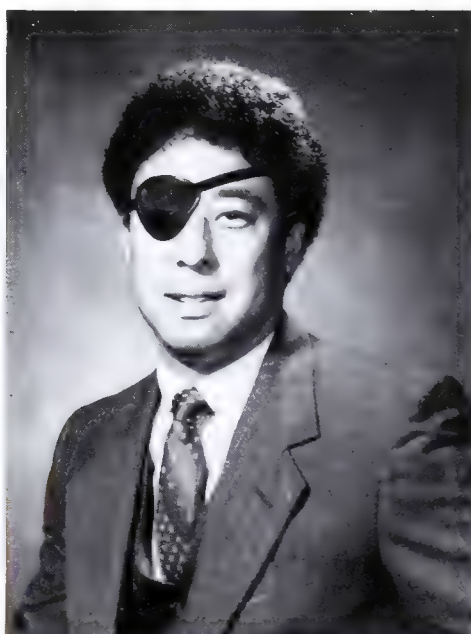
Call MIEC's Honolulu Claims Office, 545-7231, or call toll-free 800-227-4527

COMMITTED TO EXCELLENCE



Presenting the winners of the 1987 Roche President's Achievement Awards

Hoffmann-La Roche is pleased to honor these outstanding sales representatives, chosen for their unparalleled dedication to the health-care field, professionalism and consistent high level of performance. Please join us in congratulating these exceptional individuals.



Gordon B. Somekawa



Turn to the following page and find out how your award-winning Roche representative can help both you *and* your patients.

YOUR ROCHE REPRESENTATIVE WOULD LIKE YOU TO HAVE SOMETHING THAT WILL ...

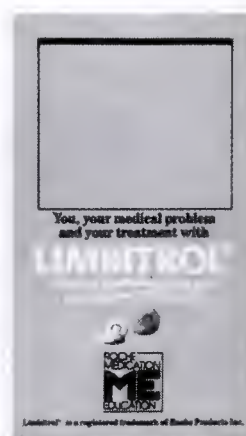
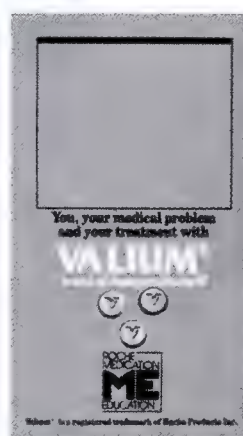
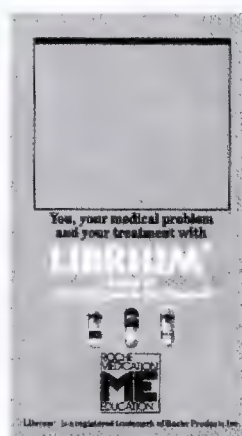
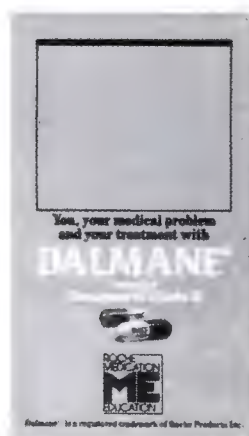


- ... improve patient satisfaction with office visits
- ... improve patient compliance with your instructions
- ... reduce follow-up calls to clarify instructions

The new Roche product books

- Offer a supplement to, not a substitute for, patient contact
- Support your specific instructions to the patient
- Provide a long-term reinforcement of your oral counseling

Because you are the primary source of medical information for your patients, we invite you to look over the Roche Product Booklets shown below and ask your Roche representative for a complimentary supply of those applicable to your practice.



Medicines that matter from people who care

HAWAII MEDICAL JOURNAL

(USPS 237-640)

Published Monthly for the

HAWAII MEDICAL ASSOCIATION

(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814

Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD

Founding Editor: HARRY L. ARNOLD JR., MD

News Editor: HENRY N. YOKOYAMA, MD

Consulting Editor: DORIS R. JASINSKI, MD, MPH

Assistant Editor and Book Review Editor:

DOUGLAS G. MASSEY, MD

Contributing Editors: JOHN M. CORBOY, MD,

FRANCIS H. FUKUNAGA, MD,

CHARLES S. JUDD, JR., MD,

Managing Editor: CHARLOTTE BEAL

Editorial Assistants: BECKY KENDRO,

JUDI KINGREY

Copy Editor: GWENDOLYN CHANG HULLEMAN

Graphic Artist: J. CHARLES DAVIS

Editorial Board

NORMAN GOLDSTEIN, MD,

THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,

JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD

(Commissioner)

HENRY N. YOKOYAMA, MD

(Chairman)

STEPHEN R.P.K. BRADY, MD, NATHANIEL P.H.

CHING, MD,

FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,

JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,

JAMES P. McGUIRE, MD, DAMKERNG PATHOM-

VANICH, MD,

ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,

J.I. FREDERICK REPPUN, MD, TERRY C.Y. WONG,

MD,

ELLA EDWARDS (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD

President-Elect: JAMES LUMENG, MD

Past President: RUSSELL T. STODD, MD

Secretary: JOHN KIM, MD

Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD

Honolulu: JOHN T. McDONNELL, MD

Kauai: THOMAS GROLLMAN, MD

Maui: HELEN S. PERCY, MD

West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD

CALVIN C.M. KAM, MD

Alternate Delegates to AMA

WALTER W.Y. CHANG, MD

RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.

Post Office Box 833

Honolulu, Hawaii 96808

Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.

16 Bruce Park Avenue

Greenwich, Connecticut 06830

Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.



O.P.T.I.O.N. Care of Hawaii

A Home IV and Nutritional Service

HAVE CONFIDENCE IN INTRAVENOUS HOME CARE

Adopting the highest standards of the profession, our I.V. team consists of specially trained clinical pharmacists and experienced R.N. I.V. therapists working together around the clock to provide the very best in I.V. home care.

INSIST ON THE BEST!
INSIST ON O.P.T.I.O.N. CARE!

WE HAVE THE SOLUTION FOR YOU®

For More Information **CALL 254-5841**

Pali Palms Plaza 970 N. Kalaheo Ave. Suite C-106 Kailua, Hawaii 96734

*Did
you
know?*

Did you know that Saint Francis Medical Center is now a surgical leader?

The only one doing organ transplants, both kidney and bone marrow, and a leader in laser surgery.



**Saint Francis
Medical Center**

Discover the Difference





FROM THE PRESIDENT

Changes in Medicare

Medicare has recently stepped up its efforts to control physician payments by attempting to "have a say" in how medical care is delivered.

The following represents changes that have recently taken place . . . they may not be permanent, and may represent further attempts to become involved in more routine medical care:

1—As of Jan. 1, 1987, Medicare raised physician fees 3.2%. Physicians who had not signed provider-assignment-only agreements by Dec. 31, 1986, had to follow complicated rules in order to determine this fee raise. These physicians are strongly urged to check with Aetna (Medicare) to find out how to calculate such raises. Improper figures may draw fines and sanctions.

2—Medicare now has the authority to determine the "Inherent Reasonableness" of a procedure and pay accordingly

(usually at a reduced fee). Initially, this is applicable to cataract surgery and attendant anesthesiologist, as well as second surgeon services.

3—Medicare is contemplating extending the denial of payments to *attending physicians* as well as to hospitals when a patient is judged to have been unnecessarily hospitalized. At present, only hospitals are denied payment.

4—Lastly, the 1987-88 proposed Reagan budget includes a provision for all inclusive payments of services to the hospital from which the physician would have to compete with other ancillary services for his payment. At last report, this was scaled down to apply only to hospital-based physicians such as radiologists, pathologists, and anesthesiologists.

Walter W.Y. Chang, MD
President
Hawaii Medical Association



Sad But Necessary

The *San Diego Union*, a daily newspaper, in its Nov. 10, 1986, issue ran an article from the New York News Service that was headlined: "Record number of doctors lose licenses." The corroborating report that was cited came from the Federation of State Medical Boards, "which represents licensing agencies in the 50 states and the District of Columbia."

The gist of the article is that there has been a dramatic increase in disciplinary actions against physicians in 1985 as compared with 1984, including outright revocation of licenses to practice, suspension or probation. These actions were larger in number than had been taken in the four years previous combined. "The new statistics come after years of criticism that many state medical boards . . . failed to punish doctors who were drunk, incompetent or impaired . . .," the article pointed out.

The article reported that 406 doctors nationwide lost their licenses in 1985, 235 were suspended and 491 were placed on

probation; 976 received lesser penalties, ranging from reprimands to restrictions in the doctors' ways of practicing. Overall, the boards disciplined four doctors out of every 1,000 in 1985; this compared with 2.5/1000 in 1984.

The article goes on to say that too few of the 553,000 licensed physicians are being disciplined, quoting "medical officials," who estimate that "at any given time, five out of every 100 doctors are so incompetent, drunk, senile or otherwise impaired that they should not be practicing medicine without some form of restriction."

These are figures we in the profession need to be concerned about. However, the experience at HMA has been one of great difficulty in trying to get our state agencies to assist our peer-review committees with the means to discipline. Preserving the individual's constitutional rights through "due process of law" is not something physicians have been trained to do. Here is

(Continued on page 79)

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo) 329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**

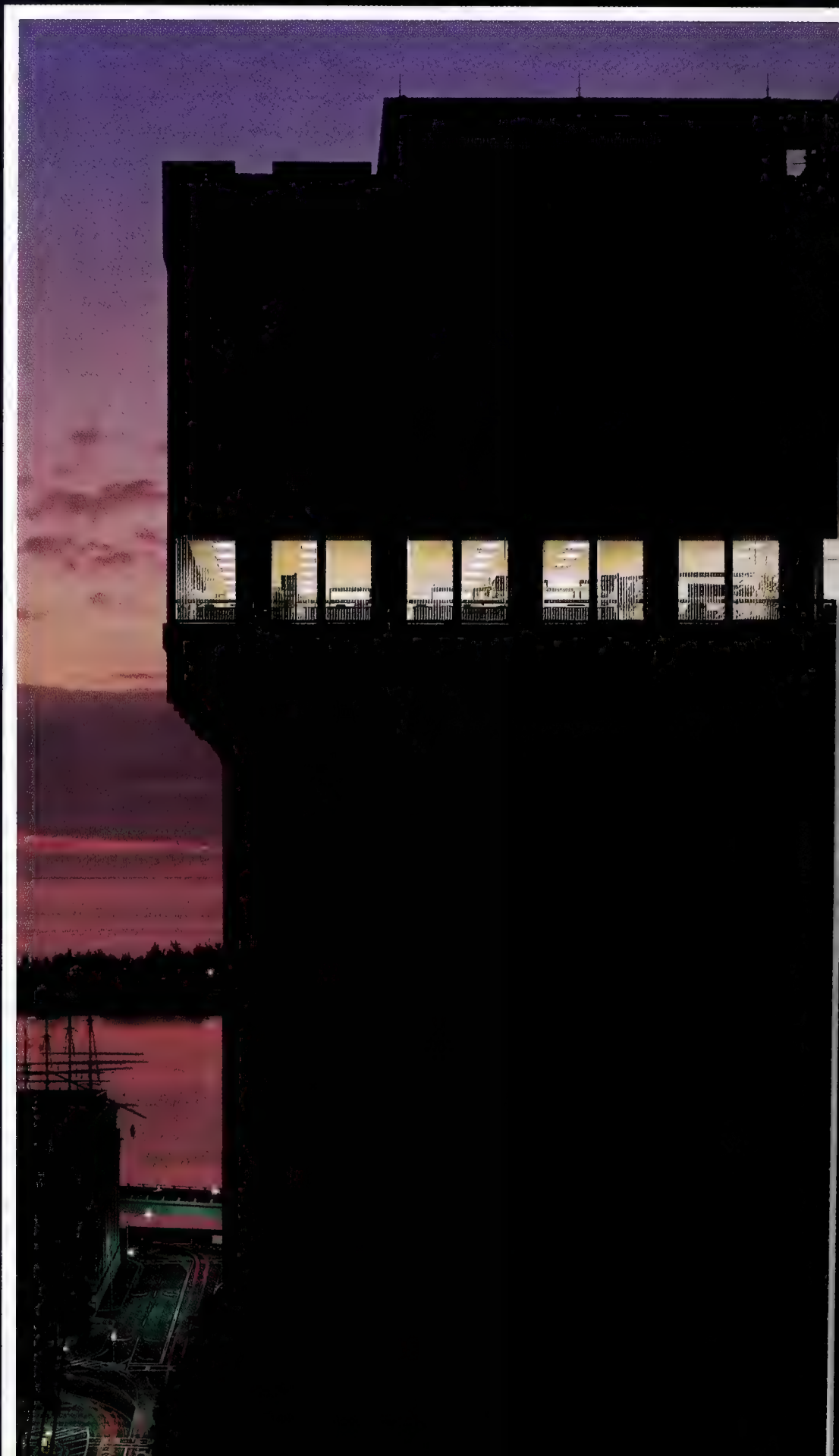
WITH A PERSONAL NET WORTH OF \$300,000 YOU CAN MOVE UP TO A PRIVATE OFFICE IN THE PENTHOUSE

When you have substantial assets, or an annual income of more than \$75,000, the highest level of banking service is essential.

Welcome to the Private Financial Services Group. Here, on the 20th floor of Bancorp Tower, you and your own PFS Officer work one-on-one. Saving you time by coordinating your banking, investment and personal trust activities. Drawing on the knowledge of specialists throughout Bancorp Hawaii. Making the most of financial and investment opportunities in a timely, strictly confidential manner.

It's personal, team banking. To make an appointment at one of our convenient PFS locations, call 537-8646.

The Private Financial Services Group
Only from Hawaii's leader



(Continued from page 76)

where we need the expertise of our lawyer friends to help us out — and not in an adversarial arena.

The *San Diego Union* article piqued our curiosity as to what Hawaii's record has been anent the nationwide picture.

Upon inquiry, John M. Tamashiro, the executive secretary of the State Board of Medical Examiners, promptly and courteously provided the HMA with the figures for the years 1980 through 1985, and of 1986 through Nov. 19. He has given us permission to publish them in the JOURNAL (Table 1).

Tamashiro also enclosed the Federation's "Official 1985 Federation Summary of Reported Disciplinary Actions" as it appeared in the October 1986 issue of the Federation's *Bulletin*; whereupon we requested permission from the Federation's executive vice president, Bryant L. Galusha, MD, to publish that report verbatim in the JOURNAL. This was granted.

The well-written, concise report is worth every reader's close attention (see page 92, this issue).

J.I. Frederick Reppun, MD, Editor

TABLE 1 Actions Taken by Board of Medical Examiners 1980-1986	
Year	Action Taken
1980	No Action
1981	1 License Surrender
1982	1 Revocation, 1 Probation (2 total)
1983	2 Probation
1984	1 Probation
1985	2 License Limitation, 2 Suspension, 2 Probation, 1 Fine (7 total)
1986 (up to 11/19/86)	6 Revocation, 1 Suspension, 2 License Limitation, 1 Fine (10 total)

Victim's Rights

Meaningful tort reform did not happen at the recent special session of the Hawaii legislature. Despite the governor's promise of demanding a package with teeth, he ultimately accepted a bill that would not cut through a custard pie. The Hawaii Academy of Plaintiff's Attorneys opposed the bill, which seems strange, since it is such puny legislation. Its supposed concern is that no attempt should be made to restrict the rights of victims to receive their just rewards through the judicial system.

Victims — yes, victims. In the practice of medicine we come to know about victims because we care for them. Receiving emergency calls at any hour of the day or night, doctors respond immediately to their suffering. We see the helpless little ones damaged by child abuse; we tend the neglected elderly people, oftentimes confused and starving and we care for the permanently scarred victims of rape. The list goes on: Gunshot wounds, hit-and-run auto trauma, muggings, frightening domestic quarrels, alcoholics with all of their attendant problems. Victims: Doctors of medicine come to know them well. Do we get paid for services rendered? Perhaps, perhaps not; but that is not the point — the truth is, we in medicine care about victims. They are our patients, and frequently they require the utmost we can give them in knowledge, skill and time.

We are told that the plaintiff's attorneys want to protect these victims. That just doesn't ring true. Such attorneys are trying hard to protect the rights of victims only when there is someone to sue. No such attorney will take the time to talk to a victim

unless he can find a deep pocket. If the victim is to have the skilled service of this supposedly caring counselor, he had better find a sizeable liability policy, or a person with considerable assets, or a successful business entity, or even better, a state, county or federal government facility. Only then are we talking about caring for victims. The others, well, they shall remain uncared for.

In medicine we make no such distinction. We provide the same level of art and science, the same attention to detail, in all of our practices. Yet, as is well known, in many such cases there is no reward for the physician or hospital. In fact, many such victims have very large medical expenses that they cannot hope to meet, and no attempt is made to collect.

It is time for the plaintiff's attorneys to stop with this "disinformation" about victim's rights. There is a serious gap in our society between the above plaintiffs and the great majority of victims who have no chance to recover damages and who may incur enormous debts. They are sometimes disabled, often lose property and income, have large medical expenses, and frequently are scarred for life.

Our state does provide a victim's compensation fund for just such unfortunate people, but it is limited to a maximum figure of \$10,000 and the average recompense for 1986 was \$1,000 per injury. One payment of \$10,000 in 1986 was to a man slashed in the throat by a pickpocket, and his medical expenses alone exceeded that figure. The victim must petition a three-member panel, and hope that help will be forthcoming. At an average of \$1,000 per injury, this is little more than a sop by 1986 standards.

Victims often do need representation and they always need support. Our present lopsided tort system, so eloquently defended by plaintiff's attorneys, provides help for a few, but it neglects the vast majority of the truly injured.

Doctors of medicine have always known about victims, their sadness, their pathos, and frequently their helplessness. It is proper for those who purport to represent victims, to stop this sham about rights when they really mean deep pockets, and to give some assistance where it is truly needed.

Russell T. Stodd, MD, Guest Editor

Erratum

The article titled *Natural Killer Cell Function in Cancer Patients Treated with Natural Leukocyte Interferon-alpha* written by Clara Ching et al. (HMJ 45: 276-291, August 1986), was printed with significant changes in the body of the manuscript and in its tables. Therefore, the article was reprinted in its entirety in the November issue of the JOURNAL 45:394-408 with apologies from the editors.

However, Murphy and his laws must have had their claws stuck firmly into our necks: The reprinted article *still* has a major error in content.

We plead with the reader to refer back to the November 1986 issue and note that on page 398, first column on the left, in the paragraph just above the bold-faced **III NK Activity . . .**, the eighth line should read:

"A significant augmentation in NK(K562) activity was seen after one week of treatment (101% ± 21 of baseline at 0 week and 166% ± 88% of baseline after 1 week of treatment), with return to baseline levels at the two-week period of IFN administration (99% ± 79). This difference was significant, P<0.05, by Mann-Whitney analysis of the first week's results. NK(HSV-1) activity increased from 94% ± 58 to 117% ± 92, with no significant difference." (end of paragraph)

HMJ Honors Milton M. Howell, MD

Milton Moore Howell, MD, of Hana, Maui, retired from the active practice of medicine on Oct. 31, 1986, at the age of 66. However, he continues to be active within organized medicine as the Speaker of the Hawaii Medical Association's House of Delegates, elected for a second term, 1986-87.

Milton Howell and his wife, Roselle, were singularly honored by a turnout of some 2,000 persons at a community luau in Hana on Nov. 15, honored for 24 years of service to the community that numbers about 1,500 people, extending from Keanae to Kaupo. The retirement was beautifully commemorated by Honolulu Star-Bulletin Maui correspondent Stephanie Castillo in an article in the newspaper's Oct. 31 issue.

The Howell family had come to Hana in 1962 from Glencoe, Minn., where Milton had been in general practice for eight years. Hana had not had a resident physician for sometime. Soon after his arrival, Milton became the driving spirit behind the building of a modern medical center and hospital in a community rather isolated by a 2½-hour drive over a narrow, winding, but very scenic, 52 miles of road between it and Maui Memorial Hospital in Kahului.

He brought the benefits of modern health care to a predominantly Hawaiian population centered about the principal employer, the Hana Ranch. The pristine, lush, tropical locale also contained the famed Hotel Hana Maui and attracted visitors from far and near by the hundreds and thousands.

Perhaps Hana's most famous resident was Charles Lindbergh, the first aviator to fly solo across the Atlantic more than 50 years ago. Milton was his physician and attended him at the time of his death at home in 1974 in a manner now coming back into its own, as Lindbergh wished, peacefully and without modern medical technological expertise meant to preserve life to the bitter end. Milton described it in an article in JAMA and the American Medical Association has incorporated this event into a movie.

The Hawaii Medical Association's immediate past-president, Russell Stodd, MD, of Maui, was one of the leading speakers eulogizing Milton at the luau. His remarks are reprinted in this issue of the JOURNAL and are illustrated by some of the many photos he took of Milton and the luau.

Milton has been honored for his medical work and for his community service many times in the past; this will undoubtedly continue in the future, because, as Russ Stodd said, "Milton is no quitter."

In 1969, Milton was chosen by the HMA as "Physician of the Year" and was awarded the A.H. Robbins plaque for community service. In 1986 he was elected by the Honpa Hongwanji Hawaii Betsuin Mission as one of Hawaii's "Living Treasures" and this year the Hawaii chapter of the American Academy of Family Physicians, will honor him as "Family Physician of the Year." He has been a member since 1958, when he joined the American Academy of General Practice, as it was then called, in Glencoe, Minn.

Milton Howell was born in Inverness in the State of Mississippi. His father was a cotton plantation owner; the family had come from Wales and England and settled in Kentucky several generations before. The Great Depression hit the family hard (six children), the father ending up getting a job as a railroad agent. Milton was born fourth in the family. His three brothers and sisters have all done well in various careers.

Milton went into the Army as a private before World War II, was commissioned in 1942 in the Armored Infantry, received the

Saluting Milton Howell, MD

(Speech given by Russell Stodd, MD, on Nov. 15, 1986)

Good friends, we are all here because our good and trusted friend Milton is quitting. This is not to suggest that he is a quitter. Quite the contrary, he has always been, and continues to be, a doer, not a quitter. Still, he is leaving the active full-time practice of medicine here in Hana.

Now, Dr. Howell has clay feet — just like the rest of us, he is less than perfect. Perhaps Roselle could reinforce that statement, but in all the years that I have known him, I haven't seen those clay feet.

Now, I have seen him in the doctors' dressing room. He has holes in his underwear just like you and me, and he gets into his surgical pajamas first with one leg and then the other. Still, he has always given me the feeling that he wears another set of shoes. He could walk from here to Kahului on water if he wished.

He has led the children (and adults) of Hana to the medical Promised Land — putting medicine here on the cutting edge of technology. He has taught students and practicing physicians alike quite well and sent them out as disciples, preaching the gospel of excellence in medicine. He has continually struck down pompous and pretending politicians when they failed to keep their word. In short, if he isn't Jesus, then I miss my bet.

Three years ago, the Hawaii Medical Association elected Dr. Howell to be speaker of the House. A studious man would have picked up Roberts Rules of Order, studied them, and gone ahead to conduct the meetings. Not Dr. Howell. He enrolled in a course of study in parliamentary procedure, studied his lessons, and took the examination to become a registered parliamentarian . . . far beyond what was expected, but completely prepared for the job at hand. And that's the kind of man he is.

Personally, he has helped me immensely — I am sure that most of you here could say the same thing. And he has always done so with everlasting patience, great kindness and thoughtfulness, and a kind of omnipotent wisdom. Probably the greatest tribute that could be paid to this good friend of ours was stated by one of our doctors at Maui Memorial Hospital one morning when he said "I believe Milton Howell would be skilled at any endeavor he undertook."

And so, oh oracle of East Maui on the west end of America, do not think you will escape your burden completely. Many of us will continue to seek advice and counsel from you in times of stress and confusion. And I know that you will be there.

Thanks and God bless you, Dr. Howell.

Silver Star for gallantry in action in the ETO as company commander in 1945, and mustered out with the rank of major.

Following his military service, he enrolled at UC Berkeley and got his B.A. in zoology, with honors, in 1948. He earned his MD at the University of Rochester School of Medicine in 1952, served a rotating internship of one year at the USPH hospital and NIH in Maryland and then had a year of internal medicine residency at the USPHS in Norfolk, Va., 1953-54. He then



Some 2,000 friends and fans honored Dr. Milton Howell at his retirement luau Nov. 15, 1986, in Hana, Maui. Mahalo to HMA Immediate Past President Russell Stodd, MD, for providing photo coverage of the event . . . and a warm aloha to Dr. Howell and his wife, Roselle (upper left).

joined the Glencoe Clinic and did general practice with a lot of surgery and obstetrics. He became chief of staff at Glencoe Municipal Hospital in 1956.

Milton's interest in his community and outside of his profession came early in Glencoe. He ended up being mayor of that town from 1960 through 1962.

After moving to Hana, Maui, Milton made it a point to drive to Maui Memorial Hospital once a week to participate with his colleagues in staff duties and had staff privileges. He became its

chief of staff in 1966. Also, as clinical professor at the University of Hawaii School of Medicine, he taught preceptorees at Hana and received an "Excellence in Teaching" award from the school in 1981.

Milton has been the family practice member of the editorial board of the JAMA. He has also been written up as a model family practitioner in *Today's Health* (March 1970), and in the JAMA "Medical News" Section (9/16/74).

Mrs. Howell — Roselle — is very much a community-minded

person in her own right and much beloved by the Hana community. It is perhaps she who is the major reason for Milton's retirement: "It's time he was more mine than being at the beck and call of everyone else; I want to be able to waken at night and touch him, instead of finding an empty spot in the bed!" Their four children are now fully grown and have flown the coop.

Milton has a great interest in developing a citrus orchard and becoming a full-time farmer; he is still vitally interested in the Nature Conservancy and the Kipahulu preservation project. Mayor Hannibal Tavares has asked him to serve on the Maui Charter Commission and Milton is already on the Maui Water Board.

The Howells plan to travel extensively and to enjoy retirement but Milton's immediate plans include doing locum tenens in Seattle and elsewhere. "Too many of my colleagues and friends put it off until they are beyond enjoying retirement," he says.

Another good reason to retire now, says Milton, is that he has found a young physician, Randall Doner, to take his place. Doner has been with Milton the past two years and Milton feels

comfortable about turning over his longtime patients to Doner. Having been solo and on call for all OBs and emergencies for many years, Milton feels he needs to relax. He also feels that the community would be better served with two physicians present, so that each one can be less burdened than he has been, and that is what will probably ensue at Hana.

This dedicated and caring physician would encourage youngsters to enter the profession if they show a real interest in doing so. "It is still the most satisfying of professions," he says. "General practice is passe," he continues, "but a family physician or a good general internist will always be in demand to be the patient's advocate in helping him through the maze of modern, highly specialized fields of medical care."

The future of medical practice is fraught with uncertainties, Milton feels, but there will always be a slot for a physician whose reputation is built not only on "smarts" but also on genuine concern for the patient's welfare.

J.I. Frederick Reppun, MD
Editor

Continuing Medical Education

CALENDAR OF ACCREDITED EVENTS — CATEGORY 1

Accredited programs of CME allow one unit of AMA credit for each hour of instruction excluding all "breaks." Asterisked programs also are accredited for AAFP prescribed credit.

LOCAL ACCREDITED PROGRAMS ONGOING

American Cancer Society, Hawaii Pacific Division Inc.

1. Skin Tumor Conference, first Friday, 12:30 - 1:30 p.m., Queen's University Tower, Room 504.

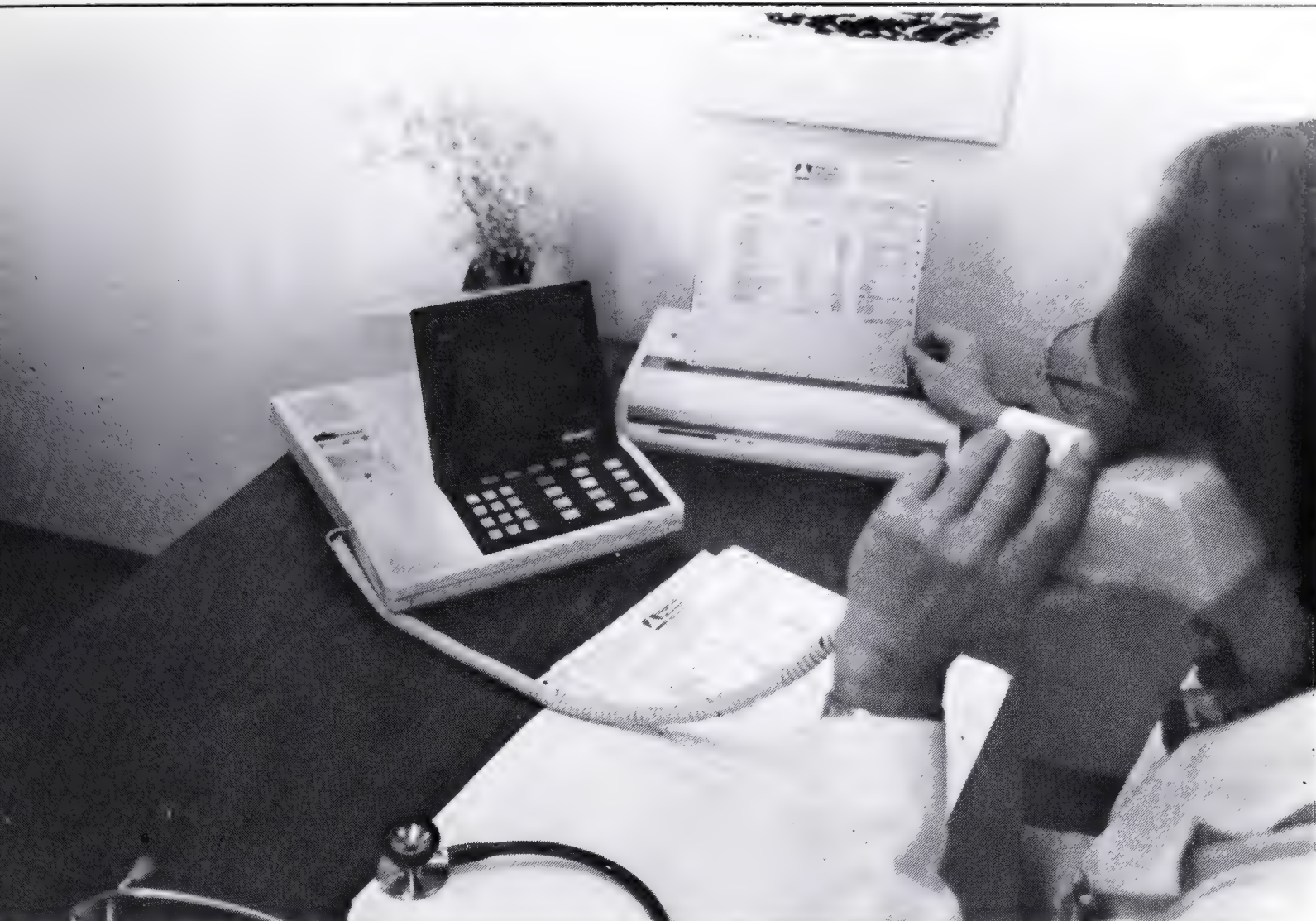
John A. Burns School of Medicine

1. Department of Medicine
 - *A. Case Conferences, second and fourth Tuesdays, 12:30 - 2 p.m., Queen's University Tower, Room 618.
 - *B. Grand Rounds, first and third Tuesdays, 12:30 - 2 p.m., Queen's University Tower, Room 618.
 - C. Endocrinology Grand Rounds, first Tuesday, 5:30 - 6:30 p.m., Queen's University Tower, Room 506.
 - D. UH-Queen's Conference, every Friday, 8 - 9 a.m., Queen's Medical Center, Mabel Smyth Auditorium.
 - E. Cardiology Grand Rounds, third Tuesday, 6:30 - 7:30 p.m., Queen's University Tower, Room 508.
 - F. Infectious Disease Grand Rounds, first and third Thursdays, 5 - 6 p.m., Queen's Nalani I Conference Room.
 - G. Dermatology Grand Rounds, second Wednesday, 7:30 - 9:30 a.m., Queen's Medical Center, Queen Emma Clinic.
 - H. Pulmonary Grand Rounds, fourth Monday, 12:30 -

1:30 p.m., Queen's Medical Center, Kamehameha Lounge.

- I. Nuclear Medicine Grand Rounds, third Wednesday, 5 - 6:30 p.m., Straub Clinic & Hospital, Doctors' Dining Room.
 - J. Medical-Surgical GI Grand Rounds, third Friday, 12:45 - 1:45 p.m., Kuakini Hospital, PB4 Classroom.
 - K. Rehabilitation Hospital of the Pacific Grand Rounds, first and third Thursdays, 7:30 - 8:30 a.m., Rehab. Conference Room, first floor.
 - L. Neurology Grand Rounds, second Thursday, 12:30 - 1:30 p.m., Queen's Medical Center, Kam Auditorium.
2. Department of Obstetrics and Gynecology
 - *A. Grand Rounds, Wednesdays, 7:30 - 8:30 a.m., Kapiolani Women's and Children's Medical Center, second-floor auditorium.
 - B. Tuesday Conference, Tuesdays, 1-2 p.m., Kapiolani Women's and Children's Medical Center, second-floor auditorium.
 3. Division of Orthopedics
 - A. Fracture Conference, Mondays, 5 - 6 p.m., Queen's University Tower, Room 618.
 - B. Shriners' Tuesday Conference, Tuesdays, 7:15 - 8:15 a.m., Shriners Children's Hospital, Auditorium.
 4. Department of Pediatrics
 - A. Grand Rounds, Thursdays, 8 - 9 a.m., Kapiolani Women's and Children's Medical Center, second-floor auditorium.
 - B. Monday Noon Conference, 12:45 - 1:45 p.m., Kapiolani Women's and Children's Medical Center, second-floor auditorium.

(Continued on page 94)



As Hawaii's own independent clinical laboratory,

Diagnostic Laboratory Services serves you and your patients with advanced computerized technologies for maximum reliability and efficiency. **DLS** provides a broad scope of high quality lab services at a reasonable cost. **DLS** offers physicians and hospitals the latest information systems to enhance their practices and benefit their patients.

Creative physicians today use innovative supporting services to the advantage of their patients and practices. With our skilled staff, state-of-the-art instrumentation, and centralized computer system, we can assist you in providing your patients better medical care.

Networking

DLS offers physicians and hospitals the opportunity to utilize LABNET, a new dimension in laboratory services: an on line computerized information system allowing you immediate access, 24 hours a day, to comprehensive clinical information while simultaneously protecting its security and confidentiality.

Centralized Computer System

DLS is computerized from the moment patient information and specimens are registered to the final delivery of results to your office by courier or LABNET. For the extra protection of your patients, our computer highlights all significant abnormal test results, alerting our Client Service Department to call your office.

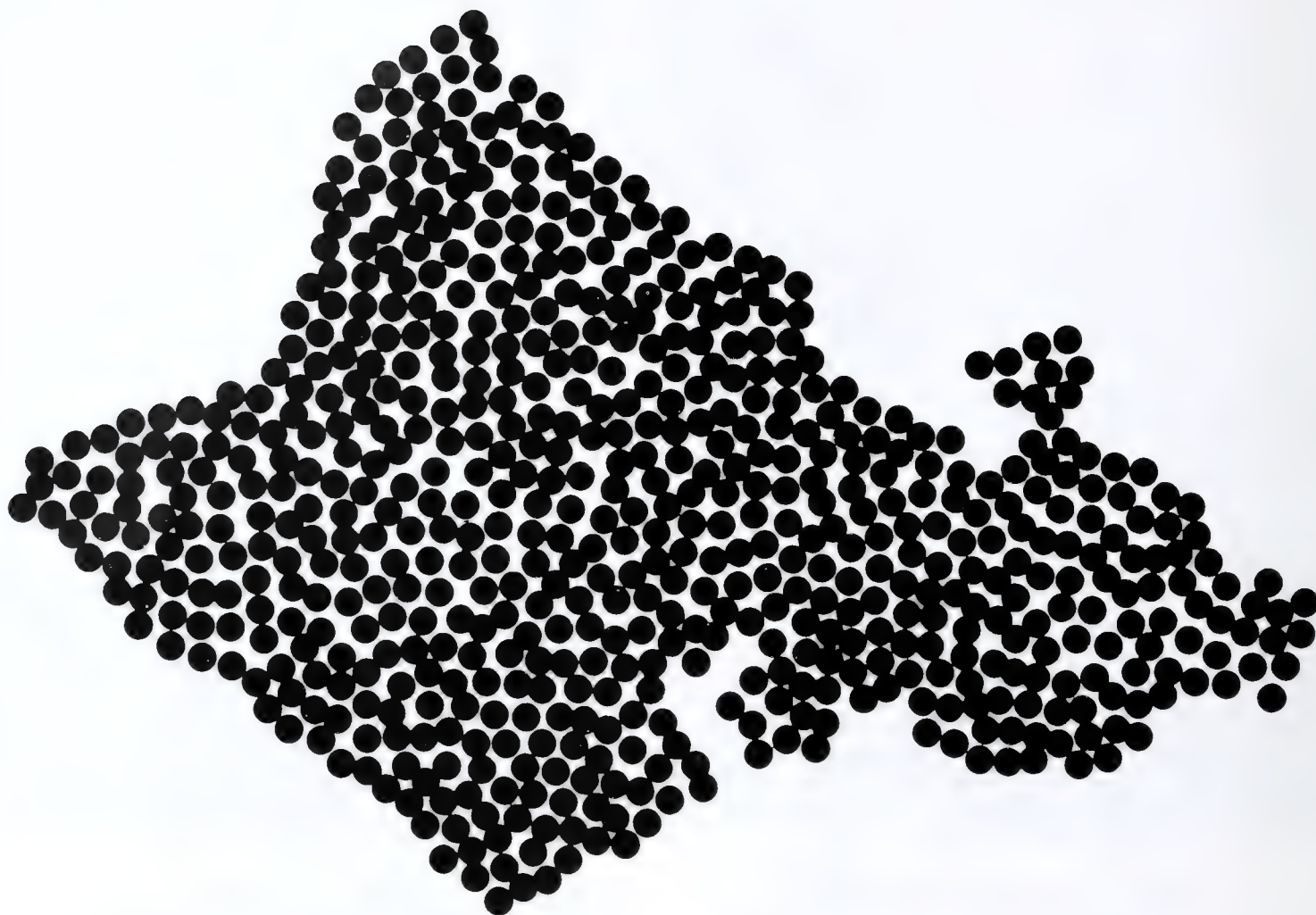
Additional Services

- Automated Hematology
- Multi Channel Chemistry Analyzer
- Broad Range of In-House Esoteric Testing
- Disease Oriented Profiles
- Flexible Billing
- HMSA Assignment Accepted

Put us to the test.

 **Diagnostic
Laboratory
Services INC.**

523-7061



Only Hawaiian Tel's pager network can reach you at all these points.

We'll get right to the point.

Hawaiian Tel offers the only pager network that provides Island-wide and state-wide coverage.

So you're in touch from Waimea to Waimanalo. Makaha to Makapuu. Haleiwa to Honolulu. And all points in between.

We also offer extensive Neighbor Island and interisland service. Comprehensive warranties on every pager we rent or sell (both tone and digital readout models). Plus, our monthly network service fee works out to less than a dollar a day. That's a small price to pay for constant contact with your business.

To take advantage of all our good points, call 732-9500 on Oahu or 1-800-232-8822 on the Neighbor Islands.

HAWAIIAN TEL GTE

Beyond the call

Anti-thymocyte Globulin Therapy of Hematologic Disorders

Joana Magno, MD*
Melvyn Kaneshiro, MD**
Kris Doney, MD***
Jeffrey Nakamura, MD****

A more sophisticated understanding of the immune process has recently allowed for more detailed studies to be done of the relationship between the immune system and hematopoietic proliferation and differentiation.

Introduction

Cytopenias, from pure red cell aplasia to aplastic anemia, are in many instances felt to be the result of poorly regulated immunologic reactions against the host stem cells. In particular, the T-cell system, both helper and suppressor, is felt to play a role in the regulation of the proliferation and differentiation of the peripheral stem cell. It thus seemed reasonable to postulate that immune modulation by anti-thymocytic globulin might alter the course of these syndromes. Three studies^{1, 2, 3} have prospectively studied the use of anti-thymocytic globulin (ATG) in the therapy of aplastic anemia. More recently, a study has looked at the efficacy of ATG in pure red cell aplasia.⁴

Anti-thymocytic globulin has become commercially available for the treatment of aplastic anemia as ATGAM, manufactured by Upjohn Pharmaceuticals, Kalamazoo, Mich. For those patients who are not otherwise candidates for bone marrow transplantation, ATG appears to be of benefit, as has been shown in several prospective studies. ATG's action is presumable against suppressor T-cells, which are thought to suppress bone marrow hematopoiesis. A more recent study also implicates deregulated production of interferon as another mechanism for the development of aplasia.⁵

Methods

We have recently reviewed our experience with ATG in the State of Hawaii. The initial presentation, short- and long-term

outcomes, as well as complications were analyzed in these patients.

Our eight patients includes six cases of aplastic anemia of variable duration, all falling into the categories of severe or moderately severe degrees of aplastic anemia. There is one case of pure red cell aplasia, thought to be secondary to chronic Epstein-Barr viral infection. Another case was initially diagnosed and managed as ITP, but subsequently evolved into a pancytopenic aplastic anemia-like picture.

Eight patients were treated with ATG, either in Hawaii or in collaboration with Fred Hutchinson Cancer Research Center. During their care, these patients received standard supportive care that included red cell and platelet transfusions. Broad spectrum antibiotics were administered for significant febrile episodes associated with granulocytopenia. Isolation included the use of private rooms, hand washing, and face mask. No laminar air flow facilities were utilized in the study.

In our protocol, our patients had negative intradermal reactions to 1:1000 dilution of ATG (ATGAM). The patients then received ATG, 16 mg/kilogram daily intravenously for 10 days. The daily dose was diluted into 1 or 2 liters of half-Normal Saline and infused over a period of 12 hours. Premedications for the treatment included Benadryl and Hydrocortisone as needed.

Case 1

59-year-old Hawaiian-Chinese Female: This patient presented to the clinic with recurrent epistaxes of approximately one-week duration, previously treated at an emergency room with packing and subsequently referred to an ENT specialist for cautery. Ultimately, a CBC was obtained because of her persistent bleeding and she was found to have profound thrombocytopenia with a platelet count of 3,000.

On admission to hospital, she had no history of significant exposure to toxins and her past history was remarkable only for her having had congestive heart failure, COPD, and degenerative arthritis for which she took a non-steroidal anti-inflammatory medication. On further questioning, she also had a two- to three-month history of increasing fatigue, fevers and chills, and most recently had noted easy bruising.

The physical exam was remarkable only for the presence of scattered petechiae and ecchymoses. Laboratory exam showed

Accepted for publication November 1986

John A. Burns School of Medicine
University of Hawaii

Fred Hutchinson Cancer Research Center

*Chief Resident, University of Hawaii Integrated Medical Residency Program

**Associate Professor, Department of Medicine

***Assistant Professor, University of Washington

****Assistant Professor of Medicine, University of Hawaii, Director of Department of Medicine, Kuakini Medical Center

TABLE I
Cases Receiving ATG Therapy

PT/Age	Sex	Race	Diagnosis	Presenting Symptoms	Onset
1 59	Female	Haw/Chi	Aplastic Anemia	Epistaxis	1982
2 81	Female	Japanese	Aplastic Anemia	Chest pain, fatigue, bruising	1983
3 53	Female	Japanese	Aplastic Anemia	Near syncope, HX epistaxis	1984
4 69	Male	Japanese	Aplastic Anemia	Fatigue, SOB	1984
5 48	Male	Hawaiian	Red Cell Aplasia	Longstanding anemia, chronic fatigue, lymphadenopathy	1973
6 58	Male	Caucasian	Pancytopenia, ITP	Chronic fatigue	1977
7 65	Male	Filipino	Aplastic Anemia	Anemia	1984
8 61	Female	Japanese	Aplastic Anemia	Longstanding anemia, fatigue, bruising, S/P splenectomy	1968

* Subsequently found to be acute leukemia

that she had a WBC of 5.2 with 24 P/74 L/2 Eo and a H/H of 10.8/33.1. The bone marrow showed marked hypocellularity with a predominance of plasma cells and lymphocytes. Further lab tests showed positive antibodies to Hepatitis B, but were otherwise negative for other etiologies for her plastic state.

Treatment was initiated with ATG. The patient developed arthralgia, chills, fever, and hypotension with the initial dose. Subsequent doses were premedicated with steroids and antihistamine, and the 10-day course was otherwise well-tolerated. Supportive transfusions of packed red cells and platelets were given as needed.

Approximately two days after completion of the course of ATG, the patient again became febrile to 103 degrees F and was evaluated for sepsis in light of the profound leukopenia. Hepatomegaly and a mild rise in the transaminases were also noted. The initial impression was that the patient was experiencing serum sickness.

Subsequent development of tachypnea with a right lower lobe pulmonary infiltrate was treated with a cephalosporin and an aminoglycoside; *Enterobacter* was recovered from the sputum. Of note, however, was a drop in the Hemoglobin from 11.9 to 8.3. An intra-parenchymal hemorrhage was considered as being a possible cause of the pulmonary infiltrate but no invasive diagnostic tests were done in order to pursue this possibility because the patient continued to have recurrent intermittent epistaxes. Although we succeeded in withholding intubation and mechanical ventilation, the patient's status was quite tenuous during that period of time. However, over the course of the next two weeks, the patient's respiratory problem was resolved.

At discharge, five weeks after admission, her CBC showed stabilization with a WBC of 4.6; H/H of 10/30; Plts 4,000.

After discharge, the patient was found to have peripheral neuropathy involving her lower extremities; this was thought to be possibly related to the ATG. Her CBC showed normalization over the subsequent years. She also developed bilateral aseptic necrosis of the hips, requiring bilateral total hip replacements. A CBC at one year was normal. She has had a recent mild relapse of her blood counts.

Case 2

81-year-old Japanese Female: This woman had a longstanding history of hypertension and diabetes and presented to her physi-

cian with complaints of chest pain, increased fatigue, mild weight loss, and increased bruising. An EKG showed changes consistent with ischemia. A CBC showed pancytopenia. Once transfused, her chest pain did not recur.

On referral, a bone marrow was done, showing hypocellularity of all cell lines without evidence of leukemia. There was no history of environmental exposure to toxins; examination revealed only petechiae and guaiac positive stools. The WBC was 1.6 with H/H of 12.2/36.5; 15,000 platelets.

The patient was admitted to hospital for ATG therapy, which was tolerated well, although she developed a febrile reaction as well as leukopenia. A gram negative urinary tract infection was treated and the patient was discharged and improved.

On an outpatient basis it became evident that the ATG therapy had been unsuccessful, and she required frequent blood transfusions. Two months later, she was readmitted with aeromonas sepsis and pneumonia. She suffered a cardiopulmonary arrest with anoxic encephalopathy and died.

At autopsy, it was evident that the patient's marrow had become hypercellular and leukemic.

Case 3

53-year-old Japanese Female: An otherwise healthy woman was admitted to hospital after an episode of syncope. Physical examination was normal, but she was monitored for arrhythmias. On laboratory examination, she was found to have mild pancytopenia with WBC 4.3; H/H 1.9/33.1; 98,000 platelets. After a two-day hospitalization, she was discharged with a presumed diagnosis of vasovagal syncope.

Later outpatient evaluation uncovered a history of spontaneous nose-bleeds in the patient as well as in her two sons. Laboratory studies showed declining counts and a bone marrow aspirate showed hypoplasia. On readmission for therapy, the patient had minimal complaints and had petechiae only on the palate. Her CBC then showed WBC 3.0; H/H 8.4/25.5; 18,000 platelets. Other tests showed an elevated Leukocyte Alkaline Phosphatase score of 260 (normal 13-130); and a negative sucrose hemolysis test.

ATG therapy was started and it was complicated by the onset of fever, rash, and profound pancytopenia. Facial herpes was treated with acyclovir; a coagulopathy resulted in pulmonary hemorrhage with resultant cardiopulmonary arrest. Acute renal

TABLE II
Cases Receiving ATG Therapy
Laboratory Data

PT	Bone Marrow	Other Tests	Pre-RX	1 MO	3 MO	Long-term
1	Hypocellular	+ Hepatitis B Antibody	W 5.2 H 33.1 P 3	W 7.0 H 23.3 P 15	W 5.8 H 33.0 P 79	W 6.0 H 39 P WNL
2	Hypocellular	Inadequate marrow for cytogenetics	W 1.7 H 33.1 P 7	W H P	W 1.3 H 28.2 P 2	Expired
3	Hypocellular	-PNH	W 3.0 H 25.5 P 18	Expired	—	—
4	Hypocellular	-Coombs, -SPEP -PNH 45 X, 46XY	W 4.0 H 25.0 P 16	W 1.2 H 34 P 11	W 5.8 H 37 P 114	W 3.7 H 36 P 76
5	Hypocellular	+ EBV, + Coombs Ferritin > 500 -HBSAG Inadequate marrow for cytogenetics	W 8.2 H 22.8 P 344	W 8.8 H 24.0 P 330	W 12.8 H 26.3 P 433	W 13.4 H 26.0 P 540
6	Hypocellular	HI PLT IG G, -Coombs Inadequate marrow for cytogenetics	W 2.2 H 19.9 P 138	W 4.4 H 33.6 P 90	W 3.2 TXH 28.8 P 415	W 2.2 H 23.7 P 97
7	Hypocellular	-Ana, -Coombs, + Hepatitis B Antibody	W 0.5 H 37.7 P 1	W 2.8 H 31.3 P 18	W 3.3 H 24.7 P 34	W 3.9 H 27.5 P 31
8	Hypocellular	-ANA, -Coombs, -PNH	W 2.0 H 22.9 P 33	W 1.7 H 31.0 P 13	W 2.2 H 33.6 P 60	—

failure ensued. She was treated with hemodialysis but a refractory hypotension, presumably septic, developed and the patient expired.

Case 4

69-year-old Japanese Male: This patient presented with a several-week history of fatigue, lightheadedness, shortness of breath, and chills. He was otherwise in good health, in spite of a significant history of exposure to garden insecticides. As an outpatient, his initial CBC showed WBC 4; Hct 30; 30,000 platelets. The marrow was hypocellular. Other laboratory tests were negative for hemolysis and B12 deficiency; he had a negative SPEP. Cytogenetic studies showed that he had an abnormality with 45X, 46, and XY.

About six months later, he developed significant acute shortness of breath and required hospitalization. He was transfused with 3 units because of an Hct of 25, with symptomatic improvement. Subsequently, he was referred to Seattle, Wash., for treatment with ATG, which he tolerated well, except for the development of a generalized maculopapular rash.

Since that time, he has remained improved with WBC 3.5-5; Hct of 36 without need for transfusion; and platelets of 75-118,000.

Case 5

48-year-old Part-Hawaiian Male: This patient's complex history goes back 12 years to when he was found to have hematuria, mild renal insufficiency, a polyclonal hypergammaglobulinemia and lymphadenopathy. When he later developed anemia, steroid and cytoxan therapy was initiated, with some temporary improvement.

Further diagnostic tests, including bone marrow, lymph node, and rectal biopsies, ruled out lymphoma, myeloma, and amyloidosis. There was a plasmacytoid infiltrate in the nodes and marrow, however. Coombs direct and indirect tests were positive; hepatitis antigen was negative. Although several diagnoses, including angioimmunoblastic lymphadenopathy, rheumatologic disorders, and lymphoma were entertained, nothing was conclusive.

Over the last several years, the anemia has progressed and the patient has required frequent transfusions. He also has antibodies that made cross-matching with donor blood difficult. Platelets and granulocytes have not been involved in this process.

The patient was referred to Seattle where he underwent extensive investigation. A CT Scan showed no evidence of

TABLE III
Cases Receiving ATG Therapy

Patient	Atg RX	Length of F/U	Complications of RX	Outcome
1	12/82	Current	Pneumonia, pulmonary hemorrhage, aseptic necrosis, both hips peripheral neuropathy	normal counts
2	4/83	Expired 7/83	Fever, chills, pre-terminal sepsis	no improvement autopsy: leukemia
3	2/84	Expired 2/84	Fulminant serum sickness, pancytopenia, sepsis	expired
4	11/84	Current	Rash	improved
5	11/84	Current	Fever, chills	slightly improved, not requiring TX
6	12/84	Current	Fever, chills, rash, legionella pneumonia, respiratory failure	improved
7	2/85	Current	Pneumonia, sepsis	improved
8	2/85	Current	Chills, rash, arthralgias	improved

thymoma, hepatosplenomegaly, or intra-abdominal lymphadenopathy. Epstein-Barr virus studies indicated the viral capsid IgG to be elevated to a titer of 1:320. Capsid LgG titers were 1:20 and early antibody titers were also 1:20. These values were consistent with recent or persistent Epstein-Barr virus infection; consideration was given to the fact that this patient may have had red cell aplasia due to a chronic viral infection.

The recommendation of the Seattle group was to place the patient on a trial of i.v. and then oral acyclovir therapy. The patient was then started on this regime. Doses were adjusted for his slowly progressive renal disease, but he otherwise tolerated the treatment well, with stabilization of his hematocrit to around 22.

Because of concern about progressive renal disease due to hypergammaglobulinemia, a course of six plasmapheresis cycles was initiated. Although renal amyloidosis was a possibility, biopsy was deferred because of mild coagulopathy and concern that, should complications arise, cross-matched blood would be difficult to obtain. Also because, even with documentation, his treatment would have been no different.

Approximately six months ago, ATG therapy was initiated, and the patient tolerated his course quite well. Subsequently, he was placed on high-dose corticosteroids with some improvement again in his blood counts.

Case 6

58-year-old Caucasian Male: This patient was referred to us with a three-year history of thrombocytopenia, initially picked up on routine evaluation. He had a documented elevated platelet-associated LgG, and had been treated as an outpatient with steroids. Because of psychosis, manifested by euphoria and hyperactivity attributable to steroid therapy, he was given the alternative option of having a splenectomy performed. Four months prior to splenectomy, a bone marrow showed severely hypoplastic marrow. Peripheral counts showed a WBC of 5.2; H/H of 10.6/31.6; MCV of 121; Reticulocyte count 3.9 percent; 60,000 platelets.

After the splenectomy, the patient was maintained on prednisone 40 mg/day. Six months later, again because of adverse side effects, his steroids were discontinued and a gradual decline

in his hemoglobin was noted. Despite reinitiation of steroids, his hemoglobin did not rise thereafter.

The patient was hospitalized with worsening shortness of breath on exertion, fatigue and was found to have a hemoglobin of 6.9. He was transfused and subsequently treated with ATG. Therapy was tolerated with a minimum of side effects, most notably fever and a maculopapular rash.

As an outpatient, he showed stabilization for two to three months post-therapy insofar as he was not transfusion dependent. Subsequently, however, he required reinitiation of steroids. He has recently moved out of state, and was apparently hospitalized for gram negative sepsis, with unknown outcome.

Case 7

65-year-old Filipino Male: During initial evaluation as an outpatient for anemia, this man was found to have a hypoproliferative bone marrow. He presented himself to the hospital about five months after diagnosis, with profound weakness, fever, and was found to have a right upper lobe pneumonia and E. Coli/Pseudomonas sepsis. His CBC during this time revealed: WBC 500; Hgb. 10.6/Hct. 37.7 and only 1,000 platelets. Laboratory evaluation was otherwise positive only for a positive Hepatitis B surface antibody.

The patient was treated successfully with antibiotics. Shortly thereafter, he required evaluation for rectal bleeding and was found on endoscopy to have both a mild duodenitis and a colonic adenoma. Ultimately, his aplastic anemia was treated with ATG and he tolerated the standard course well, except for mild, transient hypotension, fever and chills.

The patient has done well since then.

Case 8

61-year-old Japanese Female: This patient had a 15-year history of anemia and easy bruising, previously diagnosed as aplastic anemia. Bone marrow biopsy and apparently shown a predominantly megakaryocytic hypoplasia, and her Hgb. was noted to have been as low as 6.1 gm/dl. She was treated with splenectomy and had remained stable. However, she was recently re-evaluated because of declining blood counts and a bone marrow that showed moderate hypoplasia. Her peripheral

REAL ESTATE OPPORTUNITIES

Conley Dew . . . of Course



KOKO KAI. Luxury custom home for those who enjoy space and privacy. Forever views of ocean, mountains and sunsets. Two private bedroom-bath suites on opposite sides of a central pool and courtyard. Indoor and outdoor spas. Three bedrooms, three-and-a-half baths, dining and family rooms, enclosed lanai, den/study. Garage and carport for four cars. Leasehold. \$535,000.

Call Iz Campbell (RA) 395-5439.

Magnificent Pacific Heights Estate. Large, charming home remodeled by Ossipoff. Nearly 1-1/2 acres Fee Simple land.

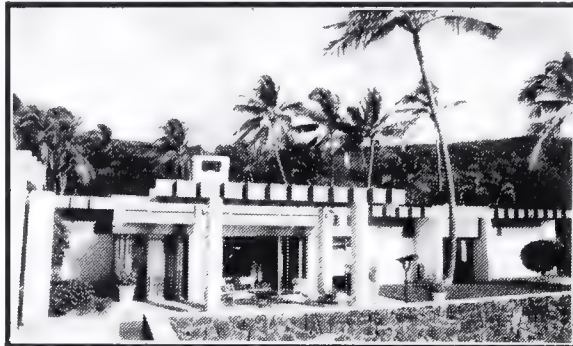
Call Barbara Dew (R) 595-3730

CONLEY DEW

333 Queen St. • Suite 710 • Honolulu, HI 96813
A Real Estate Corporation

(808) 524-2844

KULIOUOU WATERFRONT ESTATE



Bordering tranquil Paiko Lagoon, a bird and nature sanctuary, this elegant home is probably the most private waterfront listing currently available in East Honolulu. The main house, designed by architect John Tatum, is of magnificent proportions and has over 5,000 sq. ft. under roof. There is also a 4-car garage with attached studio and a separate, older 2-bedroom cottage. All situated far from the highway on over 55,000 sq. ft. of fee simple land.

\$2,500,000.



Aina Haina Shopping Centre, Suite 126
820 W. Hind Drive, Honolulu, HI 96821 • (808) 373-9869



BEACH POOL VIEW

Enjoy the luxury of this 5 bedroom Portlock Road home. Spacious and open outdoor living. (LH) \$965,000.

Call: Ari Nagai (RA) 955-7744



KAHALA HALE, INC.

4400 Kalanianaʻole Hwy., Ste. C-21
Honolulu, Hawaii 96821
Office: (808) 735-7888



ROYAL KUHIO

Completely Furnished, picture-perfect PENTHOUSE with magnificent city and mountain views. Split-level design affords maximum PRIVACY. Upgraded, unique one-of-a-kind. Designer decorated with security, amenities. \$485,000 (L).....MLS 23840

PATTI ICHIDA (RA) 395-8152

KAREN MENDRESHORA (RA) 395-6407

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

REAL ESTATE OPPORTUNITIES

STARK REALTY

Since 1968... over \$750 MILLION in sales
with a tradition of professional service and satisfied clients.

- Condominiums
- Land & Home Sites
- Waikiki
- Homes
- Rentals
- Honolulu
- Investments
- Property Management
- Outer Island

BUYING OR SELLING... CALL US FIRST



944-8744



At Yacht Harbor Towers across from Ala Moana Shopping Center
1600 Ala Moana Blvd., Honolulu, Hawaii 96815

TWO NEW PRECIOUS PROPERTIES...
AWAITS THE DISCRIMINATING BUYER!



KAILUA: KUKILAKILA—a waterfront townhome development just 5 minutes from famous Kailua Whitesand beach! Charming old Hawaiian architecture has been updated for modern elegant living! Our spacious decorator's dream home of 3 bed, 2-1/2 bath has 2,200 sq. ft. under roof! 2 car auto-garage, 2 view decks, a garden jacuzzi, red wood decking and a private entry court. Resort style amenities — fish, boat, ski, etc. A true executive family home! (L) \$167,000 Call to see!



WAIKIKI: LILIUOKALANI GARDENS—a premier Tropical development fit for Royalty! One acre of verdant gardens, ponds, paths and play pavilion are yours when you own this beautiful one bed one bath apartment! Fully furnished, richly decorated with original artworks of Tropical theme and a breathtaking view of the Ala Wai Canal, Golf Course and the Mauna Mountain range. Come & join the great folks at this prestigious address! (L) \$195,000

Call CHU LAN or JOHN SHUBERT (R) FOR SHOWINGS

SHUBERT PROPERTIES INC. 538-3500

1188 Bishop Street, Suite 2801 • Honolulu, Hawaii 96813



MLS.

NUUANU



EXQUISITE, PRIVATE RETREAT with serene mountain views overlooking formal gardens and streams. Three bedrooms, 3-1/2 baths and living areas are handsomely appointed with many custom features. Study with fireplace, ohia floors, formal dining room and renovated kitchen and baths. \$685,000 FEE SIMPLE.

VI Dolman (CRB) 373-4883

dolman
ASSOCIATES INC.
REALTORS
since 1957
531-6488

FOR THOSE WHO LOVE THE WATER...

KUKILAKILA LAKEFRONT

GORGEOUS NEW LISTING with oak flooring, panoramic view — three bedrooms, two and one-half baths, lanai, garage with automatic door. Lease, \$179,500.

Rusty Kunz (R) 263-4546

KAILUA BEACH

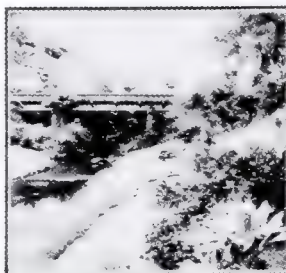
WALK TO THE BEACH from this gracious, large home — new listing! Kamaaina home with lovely yard and great privacy — three or four bedrooms, two baths, family room. Lease, \$275,000.

Bev Charley (R) 262-6454

WADE
LTD., REALTORS

25 KANEHOE BAY DRIVE
KAILUA, HAWAII 96734
Telephone 254-3521

NUUANU DOWSETT



Nuuanu Stream and historic Auwai ponds create an unusual setting for this eight-year-old custom designed 3 bedroom, 3 bath, two-story contemporary home. Separate family room; library/guest room; enclosed laundry; dramatic vaulted ceilings in living/dining room. Enjoy cozy evenings around the fireplace. FEE SIMPLE. MLS 32698. \$625,000.00

Call Susan L. Burgess (RA) 734-4242

HILL & CO.

specialists in fine residential properties

HONOLULU
373-9844



THERE'S SO MUCH TO SEE AT THE BEACH

To own a home with white sand and blue ocean at the doorstep is the ultimate dream. Oceanfrontage is a limited commodity, and beach even more so, but we have two excellent choices:

On the beach in Waimanalo. Can be either very large home or two separate, luxurious apartments.

Price reduced \$495,000 FEE.

On the beach at Makaha. 4 bedrooms, 2 baths, large lot. Ideal weekend retreat.

\$275,000 FEE

Spencer/Sewell Realty, Inc.

1585 Kapiolani Blvd. #1107

(808) 941-0511

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



Dramatic Puna Oceanfront

Vacant land. 6.48 acres in Fee Simple. Beautiful view, ironwood trees and orchids in serene setting. Rare opportunity at \$275,000.

Mary Ann Nevels (R) 734-2885

Call about our other fine neighbor island properties.

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

SCULLY ROGERS LTD.

KOKO HEAD OCEAN VIEW

ACREAGE NOW FOR SALE. BEHIND KAISER HIGH SCHOOL ON THE SLOPES OF KOKO HEAD IS THIS RARE OFFERING 4.6 ACRES OF AG LAND. PRESENTLY IN TRUCK GARDEN WITH CARETAKERS HOME. RICH LOAM SOIL BUT POSSIBLY AN ANSWER TO YOUR OWN PRIVATE ESTATE. TERMS POSSIBLE AND OWNER WILL CONSIDER SELLING HALF. LS.

\$895,000

MALAEKAHANA FEE SIMPLE OCEANFRONT

OVER AN ACRE ON ONE OF HAWAII'S BEST BEACHES. A PERFECT HALF MOON BAY WITH HOMESITES. SECLUDED, QUIET AND SOUL ENRICHING. YOUNG DOCTOR OWNER LOOKING FOR HALF INTEREST PARTNER TO DEVELOP PROPERTY. OAHU'S BEST WEEKENDER RETREAT.

\$220,000

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 713, Honolulu, Hawaii 96816

NORTH SHORE BEACH FRONT

Located on a spacious, secluded Sandy Beachfront lot, this sturdy hollow tile house is perfect for a family hui who loves fishing, swimming & basking in the sun.

Not far down the beach you can find a popular WINDSURFING area—world renowned. This is a must-see.

\$339,000 Fee

Excellent long term purchase money mortgage available.

Marianne
Abrigo Properties

P.O. Box 867, Haleiwa, Hawaii 96712 637-3511

counts demonstrated a WBC of 2.2; H/H of 7.6/22.9; 33,000 platelets. Further laboratory testing showed a negative sucrose hemolysis, negative Coomb's test and ANA, and a serum protein electrophoresis indicating mild polyclonal gammopathy. The LAP was elevated at 319 (normal 13-130).

The patient was referred to Seattle, Wash., for ATG and high-dose steroid therapy. This was tolerated well except for the development of a maculopapular rash, some arthralgias, chills, hives, and transient wheezing. On return home, the patient had chest pain associated with platelet transfusions, but with no evidence of myocardial infarction.

Three months of follow-up demonstrated that the patient has an improved hematocrit of 33, and a platelet count of 45-60,000. The WBC has remained suppressed at 2.0.

Discussion

Our patients' ages ranged from 48 to 81, with an average of 61, which is weighted toward the elderly population as compared to most series reported. The etiology of the aplastic anemias was investigated in our series. In most cases, cytogenetic studies were not done because of insufficient specimens. One patient, (Case 4) demonstrated a missing y-chromosome, which may be a normal finding in the elderly. Hepatitis B antibody was detected in Cases 1 and 7. Neither of these patients appeared to have had a recent infection with Hepatitis B. A sucrose hemolysis screen for paroxysmal nocturnal hemoglobinuria was negative in three patients.

All patients were found to have moderate to severe aplastic anemia or red cell aplasia. The Hct varied from 19.9 to 37 on hospitalization. Platelets varied from 1,000 to 138,000. The patient with red cell aplasia had a count of 344,000. WBC varied from 0.5 to 5.2. (Table II) Table II also shows the response in terms of peripheral counts as a result of ATG therapy.

The patients exhibited surprisingly less than expected evidence of serum sickness and toxicity, with only one out of eight patients showing a fulminant serum sickness. (Table III)

One patient showed complete resolution of aplasia as a result of therapy and five out of eight improved on therapy. (Table III)

Of interest is Case 4, who was found to have a cytogenetic abnormality, but who responded to therapy with ATG. Continued close clinical observation will be needed in watching for evidence of leukemic transformation in this case.

Four out of the eight patients developed sepsis shortly after ATG therapy. One patient developed late sepsis, most likely the result of a refractory leukopenia. Another patient recently developed gram negative sepsis, but further details on this case are unfortunately unavailable. The two non-survivors included an 81-year-old woman who had leukemia rather than aplastic anemia. The other patient died of pulmonary hemorrhage.

As previously reported, between 30 percent to 60 percent of patients treated with antithymocytic globulin have had signifi-

cant hematologic improvement. While the detailed molecular mechanisms responsible for the improvement are not well-delineated in our study, it appears to be clear that patients treated with ATG have had a good clinical response. This is thought to be presumptive evidence that the pathogenesis of aplastic anemia in the patients that we studied had an immunologic basis. Detailed studies of the suppressor and helper T-cell population, as well as in-vitro clonal culture studies, might shed further light on the cellular mechanisms involved in the development of aplastic anemia.

With the mortality of aplastic previously known to be 50 percent in the first four months following initial diagnosis, the results of our series would suggest that ATG is a therapeutic modality that should be considered early on in the course of the disease. While bone marrow transplantation has remained the therapeutic modality of choice, factors that mitigate against its use are in particular, age, lack of appropriate HLA donors and infectious complications and graft versus host disease. This would favor ATG as the initial therapeutic modality is selected for patients with aplastic anemia.

Conclusion

It seems clear that the immune systems plays an important role in modulating the proliferation and differentiation of the hematologic stem cells. Previously reported data, as well as our small series, would suggest that immunosuppression with anti-thymocyte globulin can substantially alter the clinical course and, therefore, by implication, the pathogenesis of these diseases.

Our results substantiate several hypotheses. First, that the immune system serves to regulate the hematopoietic stem cells as evidenced by partial or complete recovery from aplastic anemia by modulation with anti-thymocyte globulin. In addition, that anti-thymocyte globulin is a major therapeutic modality that should be instituted early on in the course of this disease. Factors mitigating against bone marrow transplantation, i.e., age and lack of availability of a bone marrow transplant donor, make anti-thymocyte globulin an extremely attractive alternative to the expectant therapy previously offered patients with cytopenias and aplastic anemia.

REFERENCES

1. Champlin R, Ho W, Gale R: Anti-Thymocyte Globulin Treatment In Patients With Aplastic Anemia. *NEJM*, 308, 113-118, 1983.
2. Speck B, Gratwohl A, Nielsen C et al: "Treatment Of Severe Aplastic Anemia With Antilymphocytic Globulin Or Bone Marrow Transplantation," *BR Med J* 6:679-687, 1981.
3. Doney K, Buckner CD, Weiden PL et al: "Treatment Of Aplastic Anemia Using Anti-Thymocyte Globulin With And Without Mismatched Marrow Infusion," *Blood*, 52:suppl:79, Abstract, 1978.
4. Abdowitz J, Powell J, Nakamura J, Adamson J: "Pure Red Cell Aplasia: Response To Therapy With Anti-Thymocyte Globulin," Submitted *Ann Int Med* 1985.
5. Zoumbos N, Gascon P, Dseu J, Trust S, Young N: "Circulating Activated Suppressor T-Lymphocytes In Aplastic Anemia," *NEJM* 312, 257, 265, 1985.

Official 1985 Federation Summary of Reported Disciplinary Actions

Dale G. Breaden*
Bryant L. Galusha, MD**

Since 1915, the Federation of State Boards of the United States has collected and disseminated information on formal disciplinary actions taken by its member boards against licensed physicians and applicants for licensure.

Individual disciplinary actions were listed in the monthly Federation Bulletin until mid-1971, but reporting by boards was not consistent or complete. As a result, the issuance of any meaningful annual figures on reported disciplinary actions was impossible.

In July 1971, disciplinary reports were removed from the Federation Bulletin and the monthly Disciplinary Action Report was created, improving the effectiveness of communication among the various boards.

Throughout the 1970s, the level and quality of reporting by the boards slowly improved and more began to use the *Disciplinary Action Report* to identify their licensees disciplined in other jurisdictions. Meanwhile, a formal recording system was developed by the Federation, establishing a permanent card file of disciplinary actions as a reference source for all member boards.

With the advent of cost-effective small computers offering large capacity and high speed, the Federation began planning the computerization of its rapidly growing disciplinary data base in the early 1980s. Implementation of the initial component of the resulting plan was begun using microcomputers and the Unix operating system.

In late 1984, a Zilog Model 32 super microcomputer was installed, bringing what by then was called the Physician Disciplinary Data Bank (DDB) to a state-of-the-art level of sophistication. By that time, with rare exception, all member boards

were reporting their formal disciplinary actions to the Federation and using the DDB to review applicants for licensure.

In 1985, based on its computerized disciplinary data and after careful review of those data by member boards, the Federation issued its first official annual summary of reported disciplinary actions: Board-by-board and national totals for 1984. The second official annual summary, covering 1985, appears here and all future releases will also be made through the pages of the *Federation Bulletin*.

No official Federation summary of formal disciplinary actions reported for any year, of course, should be assumed to reflect all formal disciplinary actions taken by all boards in that year. For a variety of reasons, some actions will be reported too late for inclusion in the summary for a particular year and a very few may not be reported at all, though the failure to report has become rare. Because of this, the Federation, on occasion, will issue official revisions of annual summaries to incorporate delayed reports.

An official annual summary, therefore, must be understood to represent only those actions reported to the Federation as of the date the summary is issued.

Table 1 represents the Federation's official summary of formal disciplinary actions reported for 1985. Its total of 2,108 actions marks an increase of 37% over the official 1984 total of 1,540.

The Federation uses four major codes in categorizing disciplinary actions. They are cited in the summary table and are defined below.

Code #	Definition
100	License revocation
200	Probation (alone or after stay)
300	License suspension
400	Other regulatory action

The 100, 200, and 300 Codes are self-explanatory. The 400 Code, which is equally important, represents a variety of other actions available to a board that give it flexibility in dealing with specific violations of the practice act in ways appropriate to the degree of violation. Included in the 400 Code are stipulation agreements, consent orders, license limitations or restrictions, narcotics permit limitations or restrictions, narcotics permit limitations, reprimands or admonishments, license or reinstatement denials, examination denials, actions related to the use of fraudulent credentials, etc.

A 400 Code action is as vital to the protection of the public as any other and cannot be viewed as secondary. **Because of this, the Federation does not approve of the use of its copyrighted annual summaries of reported disciplinary actions without the**

(Continued on page 104)

Reprinted with permission, October 1986 Federation Bulletin

Accepted for Publication January 1987

* Associate Executive Vice President,
Federation of State Medical Boards of United States Inc.

** Executive Vice President,
Federation of State Medical Boards of United States Inc.

Correspondence: Federation of State Medical Boards
of the United States,
2630 W. Freeway,
Fort Worth, Texas 76102-7199

TABLE 1

OFFICIAL FEDERATION SUMMARY OF FORMAL DISCIPLINARY ACTIONS REPORTED FOR 1985

State Board	Licence Revocation Code 100	Probation (Alone or After Stay) Code 200	License Suspension Code 300	Other Regulatory Action Code 400	Total	State Board	Licence Revocation Code 100	Probation (Alone or After Stay) Code 200	License Suspension Code 300	Other Regulatory Action Code 400	Total
Alabama State Board of Medical Examiners	3	4	2	15	24	Nevada State Board of Medical Examiners	11	2	3	14	30
Alaska State Medical Board*	0	0	0	0	0	Nevada State Board of Osteopathic Medicine*	0	0	0	0	0
Arizona Board of Medical Examiners	9	10	3	54	76	New Hampshire Board of Registration in Medicine	0	1	0	1	2
Arizona Board of Osteopathic Examiners in Medicine and Surgery	2	10	2	25	39	New Jersey State Board of Medical Examiners	17	28	31	70	146
Arkansas State Medical Board	3	1	5	18	27	New Mexico Board of Medical Examiners	2	0	0	6	8
California Board of Medical Quality Assurance	39	71	11	65	186	New Mexico Board of Osteopathic Medical Examiners*	0	0	0	0	0
California Board of Osteopathic Examiners	0	1	0	0	1	New York State Board for Medicine/Board for Professional Medical Conduct	42	14	4	15	75
Colorado State Board of Medical Examiners	0	7	7	9	23	North Carolina Board of Medical Examiners	11	6	0	13	30
Connecticut Medical Examining Board	0	4	0	0	4	North Dakota State Board of Medical Examiners	0	3	1	2	6
Delaware Board of Medical Practice	0	1	0	0	1	Ohio State Medical Board	22	7	10	28	67
District of Columbia Board of Medicine	8	0	0	1	9	Oklahoma State Board of Medical Examiners	5	16	2	17	40
Florida Board of Medical Examiners	13	34	8	77	132	Oklahoma State Board of Osteopathic Examiners	1	4	0	1	6
Florida Board of Osteopathic Medical Examiners	2	8	0	11	21	Oregon Board of Medical Examiners	2	23	0	26	51
Georgia Composite State Board of Medical Examiners	7	32	9	41	89	Pennsylvania State Board of Medicine	27	21	9	32	89
Hawaii Board of Medical Examiners	0	2	2	2	6	Pennsylvania State Board of Osteopathic Medical Examiners	0	1	9	4	14
Idaho State Board of Medicine	1	3	1	7	12	Rhode Island Board of Examiners in Medicine/Board of Medical Review	5	2	2	0	9
Illinois Department of Registration and Education	9	14	21	31	75	South Carolina State Board of Medical Examiners	5	8	4	6	23
Indiana Medical Licensing Board	9	9	21	13	52	South Dakota State Board of Medical and Osteopathic Examiners	0	1	0	0	1
Iowa State Board of Medical Examiners	1	17	2	7	27	Tennessee State Board of Medical Examiners	5	3	6	13	27
Kansas State Board of Healing Arts	5	3	2	23	33	Tennessee State Board of Osteopathic Examiners*	0	0	0	0	0
Kentucky State Board of Medical Licensure	8	16	4	4	32	Texas State Board of Medical Examiners	28	12	4	90	134
Louisiana State Board of Medical Examiners	3	8	10	14	35	Utah Physicians Licensing Board	5	12	2	24	43
Maine Board of Registration in Medicine	4	0	0	3	7	Vermont State Board of Medical Practice	1	0	0	0	1
Maryland State Board of Medical Examiners/ Commission on Medical Discipline	0	5	7	8	20	Virginia State Board of Medicine	11	27	4	34	76
Massachusetts Board of Registration in Medicine	15	1	6	7	29	Washington Board of Medical Examiners/ Medical Disciplinary Board	5	8	6	27	46
Michigan Board of Medicine	9	2	11	9	31	Washington State Board of Osteopathic Medicine and Surgery	0	0	0	1	1
Michigan Board of Osteopathic Medicine and Surgery	1	1	1	4	7	West Virginia Board of Medicine	3	4	0	5	12
Minnesota Board of Medical Examiners	2	16	1	11	30	West Virginia Board of Osteopathy*	0	0	0	0	0
Mississippi State Board of Medical Licensure	2	4	0	22	28	Wisconsin Medical Examining Board	8	0	1	28	37
Missouri State Board of Registration for the Healing Arts	34	4	1	34	73	Wyoming State Board of Medical Examiners	1	0	0	0	1
Montana Board of Medical Examiners	0	0	0	3	3	TOTALS FOR YEAR 1985	406	491	235	976	2108
Nebraska State Board of Examiners in Medicine and Surgery	0	0	0	1	1						

* Boards reporting no disciplinary actions for 1985

(Continued from page 82)

C. Pediatric Infectious Disease Conference, Thursdays, 12:30 - 1:30 p.m., Kapiolani Women's and Children's Medical Center, third-floor conference room.

D. Perinatal Grand Rounds, Fridays, 8:15 - 9:15 a.m., Kapiolani Women's and Children's Medical Center, Conference Room B.

5. Department of Psychiatry

A. Grand Rounds, Fridays, 8 - 9:30 a.m., Queen's University Tower, Room 618.

6. Department of Surgery

A. Grand Rounds, first, second, and third Saturdays, 7:30 - 9 a.m., rotating hospitals.

B. Statistical M&M, last Saturday, 7:30 - 9 a.m., rotating hospitals.

C. Journal Club, first and third Tuesdays, 6 - 8 p.m., Queen's University Tower, Room 620.

D. Medical-Surgical GI Grand Rounds, third Friday, 12:45 - 1:45 p.m., Kuakini Medical Center, PB4 Classroom.

E. Pediatric Surgical Grand Rounds, first Friday, 12:45 - 1:45 p.m., Kapiolani Women's and Children's Medical Center, Conference Room B.

F. Basic Science Lecture, Wednesdays, 7:15 - 8:15 a.m., Queen's University Tower, Room 618.

7. Department of Family Practice

*A. Conference, fourth Tuesday, 1 - 2 p.m., Kapiolani Women's and Children's Medical Center, Executive Dining Room.

8. Department of Pathology

A. Neuropathology Conference, first Saturday, 8 - 9 a.m., St. Francis Hospital, Sullivan IV Classroom.

For further information on any of these programs, please call the Continuing Medical Education office at 948-6949.

Castle Medical Center

1. CME Programs, first and third Tuesday, 12:30 - 1:30 p.m., Castle Medical Center's auditorium.

2. Windward Oncology Programs, second and fourth Tuesdays, 12:30 - 1:30 p.m., Castle Medical Center's auditorium.

For further information, call the Medical Staff Office at 263-5360.

Chart

1. CME Programs, Thursdays, 8 - 9 a.m. Topics and visiting professorships to be announced.

For further information, or to be placed on the mailing list, contact Comprehensive Health and Rehabilitation Training (CHART) at 523-1674.

G.N. Wilcox Memorial Hospital

1. General Medical Staff Meeting, Quarterly in January, April, July, and October, 7:30 p.m., Hospital Conference Room.

2. Clinical Review, Mondays and Fridays, noon - 2 p.m., Hospital Conference Room.

Hawaii Medical Association

1. HMA Maternal and Perinatal Mortality Study Committee, Monday, 5:30 p.m., on an on-call basis. 320 Ward Ave., Suite 200, Cat. 1 on hr. for hr. basis. (Call 536-7702 to confirm meeting schedule.)

Hawaii Ophthalmological Society

1. Monthly Dinner Meeting, third Thursday of each month (except July, August, and December), 6:30 - 9:30 p.m., The Pacific Club.

Hawaii Thoracic Society

1. To be announced — Visiting Professorship Program Statewide.

2. Sinclair Chest Club Quarterly Dinner Meetings, January, April, July, and October. Call Rosemary Respcio, BSN, at 537-5966 for dates and speakers.

Hilo Hospital

1. Radiology Conference, first Friday, 12:30 - 1:30 p.m., Doctor's Conference Room.

2. Tumor Conference, second Friday, 12:30 - 1:30 p.m., Doctor's Conference Room.

3. Cardiology Conference/Clinical Department Update for Medical Staff, third Friday, 12:30 - 1:30 p.m., Doctor's Conference Room.

4. Pathology Conference/Morbidity-Mortality Review, fourth Friday, 12:30 - 1:30 p.m., Doctor's Conference Room.

5. Visiting Professor/Program/Network for Continuing Medical Education Tapes (ETV), Saturdays, 7 - 8 a.m., Doctor's Conference Room.

For further information, call Administration at 969-4382.

Kaiser Foundation Hospital

1. Obstetrics/Pathology Conference, first Monday, noon - 1 p.m., Moanalua fourth-floor conference room.

2. *Medicine Grand Rounds, Tuesdays, 8 - 9 a.m., Moanalua Auditorium.

3. Tumor Board, Tuesdays, noon - 1 p.m., Moanalua Auditorium.

4. Orthopedic Conference, Wednesdays, 8:30 - 9:30 a.m., Conference Room C-D.

5. Pathology Conference, Fridays, 7 - 8 a.m., Moanalua Conference Room A.

6. Surgical Grand Rounds, Fridays, 8 - 9 a.m., Moanalua Auditorium.

*7. Family Practice Grand Rounds, fourth Thursday, 7:45 - 8:45 a.m., Moanalua fourth-floor conference room.

8. Obstetrics/Perinatal Conference, last Tuesday, noon - 1 p.m., Moanalua fourth-floor conference room.

9. Network for Continuing Medical Education (NCME) Videotape Program, Monday - Thursday, noon - 2 p.m., Moanalua Conference Room C-D.

For further information, call CME Office at 834-9496.

Kona Hospital

1. Monthly CME Meeting, third Friday, 7:30 - 8:30 a.m., Hospital Conference Room.

2. Grand Rounds/Tumor Board, first Friday, 7:30 - 8:30 a.m., Hospital Conference Room.

Kuakini Medical Center

1. Visiting Professor Lectures (ongoing).

2. Guest Lectures (ongoing).

3. Neurology Conference, second Monday, 12:30 - 1:30 p.m., private dining room.

4. Nephrology Conference, third Monday, noon - 1 p.m.,

(Continued on page 97)

HOW TO REDUCE RECEIVABLES

WITH MIBS

MEDICAL INFORMATION and BILLING SYSTEM

MIBS is an advanced outpatient medical billing system. MIBS is a total in-house system utilizing an IBM PC/AT or PC/XT. MIBS is designed for Hawaii's Physicians including extensive capability for HMSA insurance claim processing. This system offers the following advantages:

- **Daily Billing**

Processing billing statements daily or weekly improves cash flow and evens out clerical workload. A patient's first statement is based on when the first charge is available for billing. Accounts with an existing balance continue to receive one statement per month at the same time of the month. Daily billing improves cash flow by reducing the time between a patient's first visit and their first bill.

- **Collection Letters**

The practice can design and automatically generate collection letters for delinquent accounts. Practice generated collections letters are many times as effective as those sent by a pre-collection service.

- **Statement Dunning Messages**

Dunning messages on billing statements are based on the age of the account balance. This allows the practice to communicate the delinquency of the account to the patient.

- **Payment Plan**

Budget payment plans or "promise to pay" amounts can be set and tracked by MIBS. Budget payment amounts are printed on the billing statement.

- **Service Charge**

Assessing a service charge improves the collection rate. Many patients pay their accounts earlier to avoid a service charge.

- **Delinquent Account Report**

MIBS generates a report of delinquent accounts based on user specified criteria allowing the practice to focus collection efforts.



MIBS: MEDICAL INFORMATION and BILLING SYSTEM

Advanced medical billing + IBM PC Equipment (PC/XT™ or PC/AT™)
+ extensive PPMS training + professional service + continuous support

For a DEMONSTRATION on how MIBS can improve your MEDICAL BILLING
Call Bill Liggett at 521-2397.

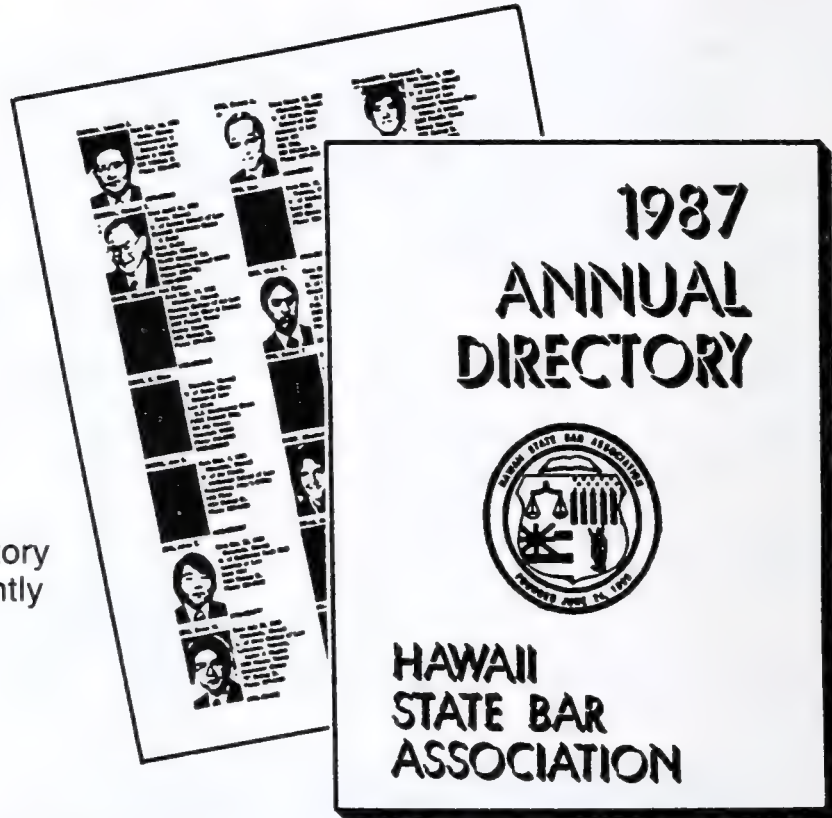
PPMS

Pacific Professional Management Systems, Inc.

1188 Bishop St. Suite 3010 Honolulu, Hawaii 96813 Ph. 521-2397

2,500 lawyers listed in the 1987 Bar Directory

Want to know about the 2,500 members of the Hawaii State Bar Association? The official annual directory for 1987 is now available and lists that number of association members — plus 48 student members from the U. of H. law school. Also features a telephone directory of hundreds of numbers frequently used by legal practitioners.



Published annually since 1972
by Crossroads Press, Inc.

The 1987 edition is \$15 each postpaid, and
tax included. Payment must accompany order.

Quantity prices: \$14 each in quantities of 10 or more
Discount applies only when ordered at one time.



Crossroads Press, Inc.

P.O. Box 833
Honolulu, Hawaii 96808

PLEASE PRINT

Enclosed is \$_____ for _____ copies of the 1987 Hawaii
State Bar Association's Annual Directory at \$15 each postpaid.

Name: _____

Address: _____

_____ Zip _____

Orders will be sent by third-class mail. Mainland orders requiring the speed of first-class delivery
should add \$1.50 per copy for extra postage.

(Continued from page 94)

- private dining room.
5. Department of Ophthalmology Meeting, first Tuesday, 12:30 - 1:30 p.m., private dining room.
 6. Internal Medicine Study Club, bimonthly, second Tuesday, 6 - 7 p.m., PB-4 Conference Room.
 7. Department of Medicine (M&M), fourth Tuesday, 1 - 2 p.m., Hale Pulama Mau Auditorium.
 8. Endocrine Conference, first Wednesday, 12:30 - 1:30 p.m., private dining room.
 9. G.I. Conference, second Wednesday, 12:30 - 1:30 p.m., private dining room.
 10. Infectious Disease Conference, third Wednesday, 12:30 - 1:30 p.m., private dining room.
 11. Tumor Board, Thursdays, 7:30 - 8:30 a.m., PB-5 Conference Room.
 12. Oncology Conference, first Thursday, 12:30 - 1:30 p.m., private dining room.
 13. Pulmonary Conference, second Thursday, 1 - 2 p.m., private dining room.
 14. Rheumatology Conference, third Thursday, 12:30 - 1:30 p.m., private dining room.
 15. Cardiology Conference, fourth Thursday, 12:30 - 1:30 p.m., private dining room.
 16. Surgical Conference, first Friday, 12:45 - 1:45 p.m., PB-5 Conference Room, (Note: Also fourth Friday, if there are five Fridays in a month.)
 17. Nutrition Conference, bimonthly, second Friday, 12:30 - 1:30 p.m., private dining room.
 18. Surgical Trauma Conference, second Friday, 12:45 -

- 1:45 p.m., PB-5 Conference Room.
19. Surgical Mortality and Morbidity Conference, last Friday, 12:45 - 1:45 p.m., PB-5 Conference Room.

Maui Memorial Hospital

1. Department of Medicine, first Thursday, 7 - 8 a.m., Auditorium.
2. Department of Surgery, second Thursday, 7 - 8 a.m., Auditorium.
3. Department of Obstetrics & Gynecology, third Thursday, 7 - 8 a.m., Auditorium.
4. Department of Pediatrics, fourth Thursday, 7 - 8 a.m., Auditorium.
5. Fifth Thursday Meeting: 7 - 8 a.m., Auditorium.
6. Tumor Board Conference; second Friday and fourth Wednesday, 7 - 8 a.m., Multi-Purpose Room.
7. Anesthesia Conference, second Wednesday, 7 - 8 a.m., Dining Room.

The Queen's Medical Center

1. Anesthesiology Conference, Wednesdays, 7 - 8 a.m., Nalani I Conference Room.
2. QMC Cardiology Rounds, Wednesdays, 9 - 10 a.m., Kam Auditorium.
3. Emergency Medicine Conference, first Monday, 7 - 8 a.m., Nalani I Conference Room.
4. ENT Conference, first and second Fridays, 7:30 - 8:30 a.m., Harkness Room 139.
5. QMC-UH Medical Conference, Fridays, 8 - 9 a.m.,

(Continued on page 103)

CLASSIFIED NOTICES

To place a Classified Notice call Margie at 521-0021.
4 line minimum, approximately 5 words per line.
Payment must accompany order.

OFFICES

- Finished office space Kaneohe 900 to 1500 sq. ft.
- X-RAY OFFICE also available. Gerell + Assoc. 524-5417

BUSINESS OPPORTUNITIES

Practice Opportunity

To buy growing Kailua Pediatrics Practice. Including equipment, lease, patient accounts etc. Principals only.
Call R. Chapman 531-6894

FOR SALE

Medical/Surgical Practice. Prime location. Maui Clinic, Kahului, Maui. Surgeon retiring. 735-5887.

SERVICES

TAGS

- AUTO REGISTRATION SERVICE**
No more standing in line.
- Registration Renewals
 - Title Transfers
 - Traffic Clearance
 - Pick-up And Delivery
 - And much more!
- 31 N. King St. Ph. 524-6791

FOR SALE

50% OFF PREVIOUSLY OWNED medical, laboratory, office, x-ray, ultrasound equipment. We buy, sell, broker, repair, appraise medical equipment. Ask about our Holter Scanning Service. Medical Equipment Resale, Inc. 24026 Haggerty Rd., Farmington Hills, MI 48018; (313) 477-6880.

EMPLOYMENT OPPORTUNITIES

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible Pediatrician needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:

D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793
(An Equal Opportunity Employer)

ISLAND FEVER?

Respected Internist desires to switch practices for a short time. Good salary. Good living conditions. Glen Deutsch MD, 410 Division St., Buffalo, MN 55313. (612) 682-3325

EMPLOYMENT OPPORTUNITIES

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible General Internist needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:

D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793
(An Equal Opportunity Employer)

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible Obstetrician-Gynecologist needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:

D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793
(An Equal Opportunity Employer)

SURVEY REPORT: 47.1% of Hawaii Medical Journal readers are involved with obtaining gifts or awards for employees or customers.

MEDICAL TEMPORARIES

Hospitals, Medical Offices, Clinics and Nursing Homes depend on Kahu Malama Nurses, Inc. to provide experienced nursing personnel to fill in staff shortages. We are a dedicated team of professional nurse recruiters who specialize in matching the expertise of our nursing staff to the unique requirements of our clients.

- Medical Assistants, Registered Nurses, Licensed Practical Nurses
- No charge for on-site orientation
- Part or Full-time
- By the hour-day-week-month

We are fully responsible for bonding, insurance, payroll, taxes, benefits and supervision.

526-3761



Kahu Malama Nurses, Inc.
680 Ala Moana Blvd., Suite 412
Honolulu, Hawaii 96813
(808) 526-3761

HOME EQUITY CREDIT LINE

Get a
loan on the
house.
Come ask us
how. We'll be
there.

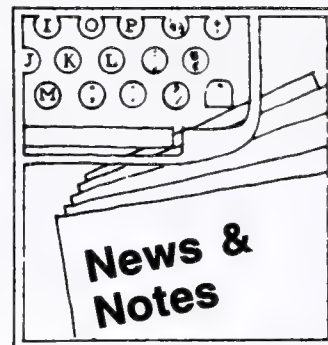


Central Pacific Bank
The Art of Service Member FDIC
Phone—544-0500

WHY AMA?

Thanks to the Patient Medication Instruction program newly launched by the AMA, you can provide your patients with important supplementary drug information. Each patient information sheet (PMI) conveys information most relevant to the patient in easy-to-understand language. Helping your patients toward a better understanding of the drugs you prescribe: it's one more good reason why you should be a part of the AMA.

To Join,
Contact your county or state medical society or write: Division of Membership, AMA, 535 North Dearborn Street, Chicago, Illinois 60610 or call collect, (312) 751-6196.



HENRY YOKOYAMA, MD

Conference Tid Bits

"Marathon Medicine" by guru Jack Scaff, Mabel Smythe:

- "We warn people to take it easy . . . Rest, or you'll get a heart attack . . . But there's no proof that rest prevents MIs."

- "Children are genetically programmed to run . . ."

- "Running and throwing are origins of all our games . . ."

Running is a primordial human act . . . It was an essential human activity that preceded intellectual activity . . .

- Re: Post-race collapse phenomenon (post-exercise hypovolemia) . . . The runner loses one pound of water every three miles, but the vascular compartment is maintained by intracellular compartment shrinkage while running . . . When he stops he becomes hypovolemic . . .

- Re: Heat stroke (hyperpyrexia): Treatment: (a) cool body with alcohol-ice packs or throw into an ice tub, (b) replace fluids, (c) give Thorazine 2mg IV for shivering.

- Re: Prevent dehydration . . . Thirst is a poor indicator . . . Give one ounce of water every 10 minutes . . . Be sure the runner can urinate after running . . .

- Re: Diabetes and Insulin: During short-term exercise, the diabetic needs insulin . . . During long-distance running, the body bypasses the insulin pathway . . .

- Re: Osteoporosis: Jogging women replace calcium in their bones . . . Also amenorrhea in jogging women replaces calcium loss . . .

- Re: Rheumatoid arthritis: "Joints don't wear out . . . They rust out . . ."

- Re: Arrhythmias: Runners develop nutritional arrhythmias . . . A vegetarian was our first casualty . . .

- Re: Age groups . . . The second-fastest group are men in their 40 to 45 age group . . . eg., Duncan McDonald and Jim Gallup.

- Re: Low back pain: "Prevent by running silently."

- "Premature death is associated with (a) lack of exercise, (b) cigarette smoking, (c) hypertension . . ."

- "Wellness is a/c physical activity."

Secretary of Health Califano's parting words: "Smoke less and exercise more."

Professional Moves

In November, orthoped Richard Lane (who

(Continued on page 101)

Any lender can help get your home improvement project started.



An AdvanceLineSM can help your home reach its full potential.

You know how home improvement projects go. First, the kitchen, then the bath, then a pool, then landscaping. And each time you find yourself trekking down to a bank for another home improvement loan. Not with an AdvanceLine from First Interstate Bank.

One trip and your AdvanceLine will see you through project after project. Year after year. AdvanceLine is a revolving personal line of credit, much like a super charge card. As you repay, you actually rebuild available credit for future use.

An AdvanceLine can be established right up to \$250,000, depending on how much equity you have and, of course, your ability to repay.

The interest rate is based on the average 91-day Treasury Bill rate during the prior calendar quarter, so you're always paying a fair, current market rate.

But perhaps most important, since your AdvanceLine is secured by home equity, you qualify for full interest expense deductibility under the Tax Reform Act of 1986 and your AdvanceLine is not limited to just home improvement use.

You can use your AdvanceLine for tuition payments, taxes, major purchases, investments or even paying off other, more expensive loans and charges.

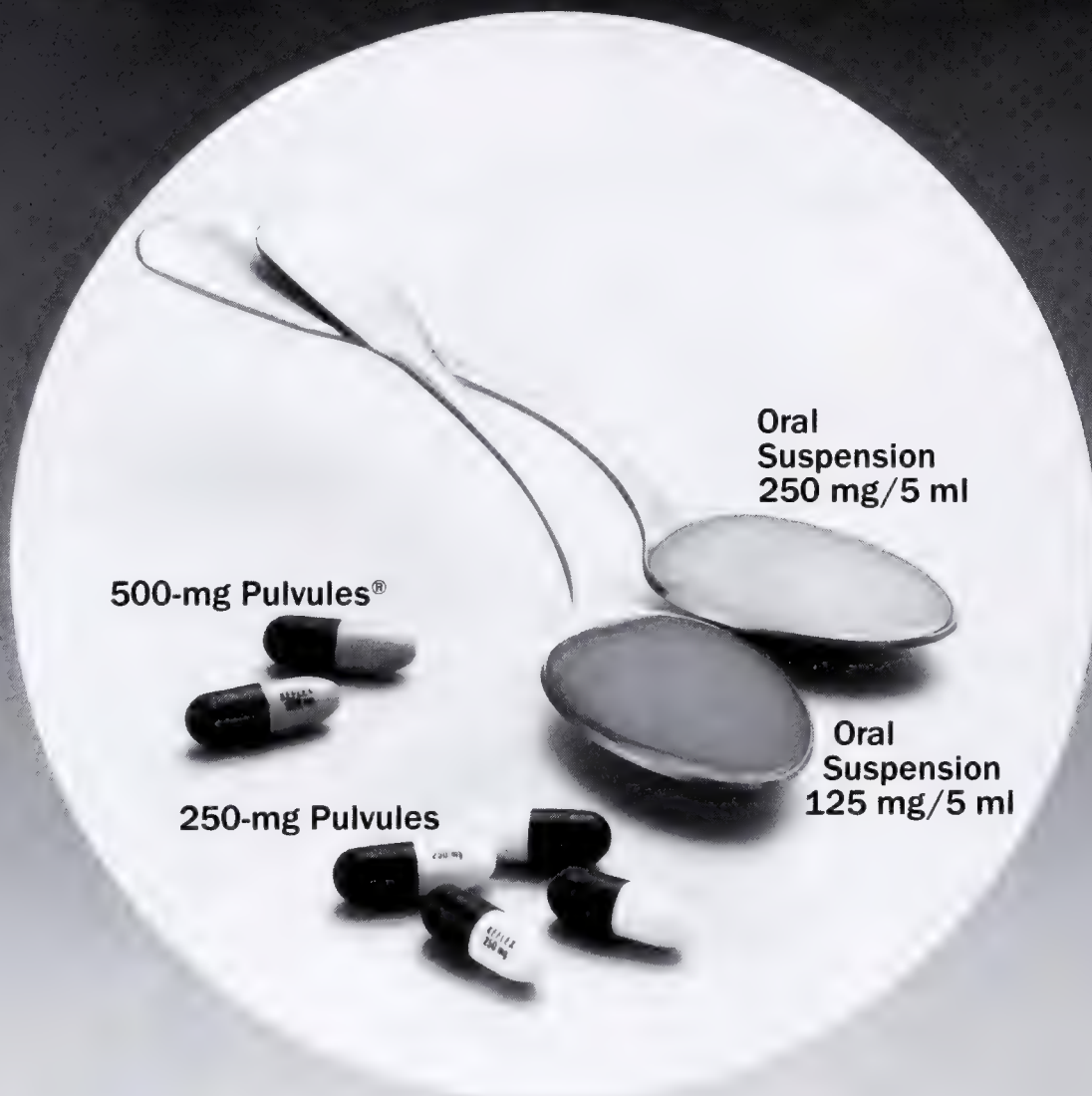
For more information about AdvanceLine, stop in at any branch or call the Consumer Loan Center at 525-8290. Let us help you get the full potential out of your home.



An equal housing, equal opportunity lender. Member FDIC.



Easy To Take



Keflex[®]
cephalexin

Additional information
available to the profession
on request.



420113

Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46285
Mfd. by Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

(Continued from page 98)

trained at Tripler and was chief of orthopedic surgery at Martin Army Community Hospital, Fort Benning, Ga.) and general surgeon Timothy Oldfather (who had been in private practice since 1978) joined the Hilo Medical Group . . . FP Eric Yee and OB-Gyn man Stephen Burgos joined the Garden Island Medical Group . . .

Mary Flynn, current resident with the U of H integrated pathology program was sworn in as deputy medical examiner replacing Richard Wong who retired in June . . . Waimea FP Norman White who had delivered at Honokaa Hospital for 4½ years decided to suspend his OB practice because of the rising liability costs and liability worries.

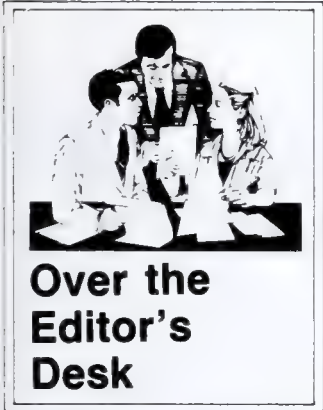
Friendly Quips

Two internists went hot air ballooning on a cloudy day . . . They got lost over the cloud layer and descended to 500 feet where they could see someone on the ground . . .

The first internist: "Hello there! Can you tell us where we are?"

Man on ground: "You are up there above me!"

Second internist: "He must be a neurologist . . . The information is precisely correct and completely useless . . ." (As told by Jack Scaff during his lecture on Marathon Medicine Nov. 28, Mabel Smythe Auditorium.)



STEPHEN R.P.K. BRADY, MD

CHINA, WORLD'S LARGEST PRODUCER OF TOBACCO, SITE FOR FIRST INTERNATIONAL SYMPOSIUM ON SMOKING AND HEALTH—SAN FRANCISCO—The world's largest producer of tobacco, will be the host country for the first International Symposium on Smoking and Health. The symposium will be held at Tianjin, China, on May 18-21, 1987. Tianjin is China's third-largest city, located on the banks of the Hai River near Beijing.

The symposium will focus on cigarette smoking in relation to cardiovascular and respiratory diseases; neoplasma; perinatal medicine; epidemiology; psy-

(Continued on page 104)

leas·a·ble

(les- 'a 'b 'l), *adj.*

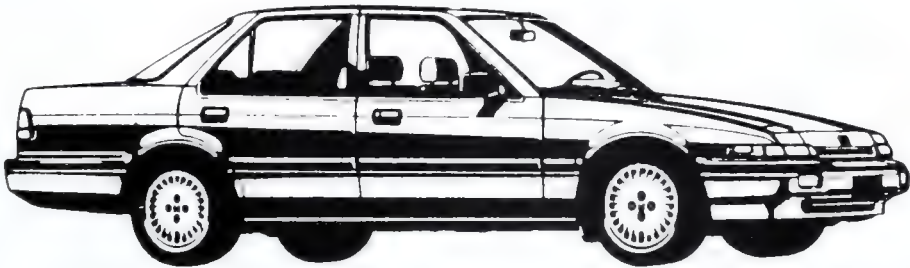
1. ability to drive more car for less money
2. opportunity to save or invest your down payment instead of putting it into a car
3. ability to benefit from the new tax laws
4. an affordable way to finance a new Honda 4 dr Accord for only

\$168.00

PER MONTH PLUS TAX

Model CA552: 1st payment, license, security deposit and process fee delivers your car

60 month closed end lease. Total of payments \$10,080 + tax



Choose from stock or order one of your choice for the same Monthly Payment.

HONDA
Windward

in Kaneohe near Likelike and Kam Highways 247-8544

If you do business in Hawaii . . .

and want to keep on top of civil cases in our courts, or tax liens, public hearings, incorporations and partnerships, or almost anything else of value in your practice

. . . we have news for you



**PACIFIC
BUSINESS
NEWS**

For information call 521-0021.



High Performance from Pacific Basin Investments


109.3%

NOMURA PACIFIC BASIN FUND

- 109.3% return for shareholders since the fund's inception.*
- Experienced professional management by Nomura Capital Management, Inc., an affiliate of The Nomura Securities Co., Ltd., the world's largest securities firm.
- The Fund's objective is long-term capital appreciation of investments in the emerging economies of Pacific Basin countries.
- No sales charge.
- No redemption charge.
- \$20,000 minimum investment.

* Total return (July 8, 1985 to August 31, 1986) based on change in share price, reinvestment of dividends and capital gains distributions. Favorable currency exchange rates during this period contributed significantly to the total return. Past performance is no guarantee of future results.

For more information about the Fund, including charges and expenses, call the number below or mail the coupon for a free prospectus. Read the prospectus carefully before investing or sending money. Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.

 **NOMURA**
(808) 538-3837
Persons-in-charge:
Call Sharon Kaya or Russell Oki



NOMURA SECURITIES INTERNATIONAL, INC.

Honolulu Office: (808) 538-3837

Persons in Charge: Sharon Kaya & Russell Oki

1001 Bishop Street, Pacific Tower, Suite 2760, Honolulu, HI 96813

Please send a prospectus detailing the Nomura Pacific Fund, Inc.

Name _____

Address _____

City _____

State _____

Zip _____

Business phone () _____

Home phone () _____

Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.
Member SIPC

HMJ

CME

(Continued from page 97)

Mabel Smyth Auditorium.

6. MICU Lecture, Tuesdays, Wednesdays and Thursdays, 9 - 10 a.m., Queen Emma Tower, Room 4B.
7. Neuro-Radiology Conference, Mondays, 8 - 9 a.m., Imaging Services classroom, first floor, Queen Emma Tower.
8. OB/GYN Conference, Mondays, 1 - 2 p.m., Kam Auditorium.
9. Ophthalmology Conference, fourth Tuesday, 4:45 - 6 p.m., Queen Emma Eye Clinic.
10. Orthopaedic Conference, Wednesdays, 7 - 8 a.m., Kam Auditorium.
11. Pathology Conference, Wednesdays, 7 - 8 a.m., Queen Emma Tower, fourth floor.
12. Pediatrics Conference, fourth Thursday, 12:30 - 1:30 p.m., Harkness Board Room.
13. Surgical Conference, Tuesdays, 4:30 - 5:30 p.m., Kam Auditorium.
14. Tumor Board Conference, Tuesdays, 7:30 - 8:30 a.m., Kam Auditorium.

St. Francis Hospital

1. Oncology Conference, Mondays, 7:30 - 8:30 a.m., Sullivan IV Classroom.
2. EENT Meeting, first Tuesday, 7:30 - 8:30 a.m., Sullivan IV Classroom.
3. Surgery Grand Rounds, first, second, and third Fridays, 7:30 - 8:30 a.m., Sullivan IV Classroom.

4. Medicine Morbidity and Mortality Conference, second Tuesday, 7:30 - 8:30 a.m., Auditorium (for SFH staff members only).
5. Hematology Conference, third Thursday, 12:30 - 1:30 p.m., Sullivan IV Classroom.
6. Visiting Professor Programs (contact Medical Education Office at 547-6497 for further information).

Straub Clinic & Hospital

1. Friday noon Conference, Fridays, 12:30 - 1:30 p.m., Doctors' Dining Room.
2. Patient Care Conference, second Tuesday, 5 - 6 p.m., Doctors' Dining Room.
3. Cardiac Surgery Conference, fourth Tuesday, 4:30 - 5:30 p.m., Doctors' Dining Room.
4. Neuropathology Conference, fourth Saturday, 8 - 9 a.m., Doctors' Dining Room.
5. Surgical Morbidity and Mortality Conference, fourth Thursday, 7 - 8 a.m., Doctors' Dining Room.
6. Visiting Professor Conference, variable time throughout the month. Doctors' Dining Room.

For further information, call the Office of Professional Activities, 523-2311, ext. 8152.

Wahiawa General Hospital

1. CME Program, Tuesdays, 1 - 2 p.m., SNF Dining Room. For further information, call the Medical Records Department, 621-8411.)

Note: All conferences are subject to change. Monthly calendar is available upon request.



**THE MOST PRECIOUS
COMMODITY OF ALL**

Time

What you do with it
is your business.

Helping you make the most of it
is ours.

**Honolulu Cellular
Telephone Company**

Hawaii's world-class cellular system operator.
1161 Kapiolani Boulevard Honolulu, Hawaii 96814 Ph. 545-4765

ERICSSON

(Continued from page 101)

chomotic illness; and, non-specific diseases. Other seminar sessions will deal with the topics of prevention and intervention measures on smoking; and, relieving dependency on cigarettes.

Some of the world's best-known authorities on the issue of smoking and health will attend and participate in the symposium.

One of the symposium highlights will be the first-time release of statistical

data, collected over a nine-year period from medical groups throughout the country, on the effects of cigarette smoking upon the Chinese population.

Registration fee after Jan. 31, 1987, is \$450 per person. The fee includes an abstract of all committee meetings and presentations; relevant booklets; official receptions including the special banquet. First-class hotel accommodations for four nights in Tianjin is \$250 per person. The single supplement is \$150. The rates

include daily American breakfast.

Brochures detailing the symposium, including a registration form, and the post-symposium tours, are available from China Express, 278 Post St., Suite 408, San Francisco, Calif. 94108. Nationwide, phone toll free (800) 227-5663; within California, (800) 547-9200. China Express is the symposium's official North American liaison office.

Federation Report

(Continued from page 92)

inclusion of the 400 Code figures. The exclusion of such figures, for whatever purpose, would be a dramatic distortion of the record and a clear disservice to the work of the boards.

The disciplinary impact of the boards cannot be measured, of course, by a simple review of the number of formal disciplinary actions they take. Most boards will deal informally with five to 10 licensees about whom concerns arise for every formal action they take. More often than not, these contacts are sufficient to significantly affect the behavior and/or performance of the licensees involved, to increase their awareness of the obligations under which they practice, and to prevent the development of more serious problems calling for formal action.

Beyond this, the process of identifying those physicians actually requiring formal or informal attention by a board often demands the careful review and closure of hundreds of cases or complaints — a difficult and time-consuming task. Clearly, actions ultimately reported to the Federation do not begin to reflect the full extent of board effort.

The Federation's Disciplinary Data Bank has rapidly become a basic working tool for the physician licensing and disciplinary boards of the country. No formal disciplinary action can be considered complete until reported to the DDB, no application for licensure can be considered effective until reported to the DDB, no application for licensure can be considered fully evaluated until screened through the DDB, and no disciplinary system can be considered effective until it includes regular review of the monthly DDB report. All of this, however, is possible only because the boards themselves have cooperated to make the DDB a reality.

Their sense of responsibility and commitment have been outstanding. They are charged with the protection of the public and the DDB is one more expression of their determination to fulfill that obligation decisively.

Put your investment in a new tax bracket: 0%

How? Invest in **Hawaiian Tax-Free Trust**. And pay **0%** in taxes on the income it earns for you.

Hawaiian Tax-Free Trust is an open end municipal bond mutual fund that's locally managed and designed especially for Hawaii residents. By investing your money primarily in Hawaii tax-free municipal securities, the Trust provides you with a high level of income which is **double tax-free*** — free of both State of Hawaii and Federal income taxes.

Big tax savings in a convenient, professionally-managed package.

Specific advantages of the Trust include:

Stability of Capital** — through continuous supervision of the portfolio, emphasizing select quality, diversification, and varying maturities.

Low Initial Investment — \$1,000; no minimum for additional investments.

Income Compounding — dividends declared daily, paid monthly; automatically reinvested or paid in cash.

Daily Liquidity — redeemable at the then current net asset value; no penalties or redemption fees.

Frequent Statements and Reports — account statements monthly as well as with each investment or withdrawal; annual audited financial statements.

INVESTMENT ADVISOR

Hawaiian Trust Company, Ltd.

A Trust and Investment Company of

Bancorp Hawaii

FOR INFORMATION

Contact Your Local Investment Broker

or call 1-800-228-4227

Toll-Free from Hawaii 7 days a week, 24 hours a day

Aquila Distributors, Inc., 200 Park Avenue, New York, NY 10017



HAWAIIAN TAX-FREE TRUST

You will be sent free descriptive material and a prospectus containing more complete information including management fees and expenses. Read carefully before you invest or send money.

*Under certain circumstances, some income may be subject to state and federal tax.
**Share net asset value is not fixed and varies with interest rate fluctuations.



Frank E. Ceccarelli, M.D.,
Urology



Susan H. Chapman, M.D.,
Obstetrics/Gynecology



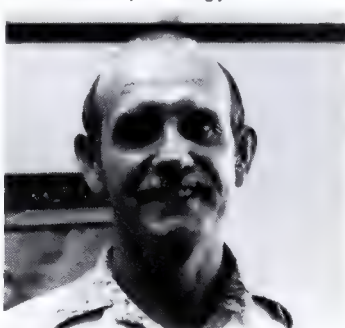
Bernard Fong, M.D.,
Cardiology



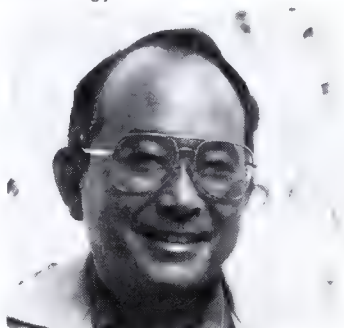
Alvin Furuike, M.D.,
Pulmonology



Thomas Y. Ito, M.D.,
Urology



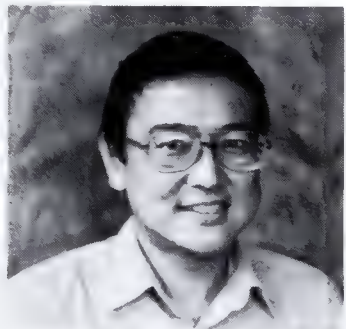
C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



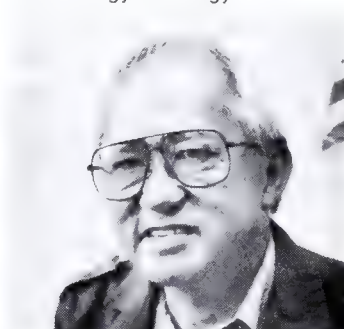
James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



Paul I. Sunahara, M.D.,
Dermatology

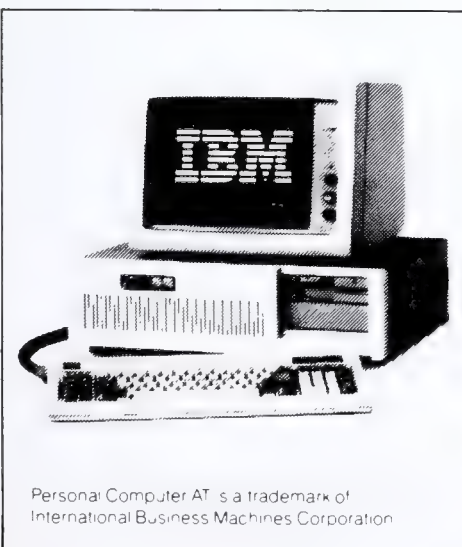


Henry L. Yim, M.D.,
Pediatrics

What do these doctors have in common?

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**



Personal Computer AT is a trademark of
International Business Machines Corporation

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary

You don't need the cash to get the deduction.

Attach Schedule 1 to Form 1040

1	Wages, salaries, tips, etc., from Form 1040A, line 6.	1
2	IRA deduction, if any, from Form 1040A, line 11.	2
3	Subtract line 2 from line 1. Write the result.	3
4	Write the amount from line 3, column (a) or (b) above.	4
5	Percentage used to figure the deduction (10%).	5
6	Multiply the amount on line 4 by the percentage on line 5. Write your answer on Form 1040A, line 12.	6

... expense ... (page 23) ... on Form 1040

You want a 1986 IRA tax deduction. But you don't have the cash for an IRA. No problem. Get a First Hawaiian IRA Loan. Even with the loan, your tax savings are substantial. And your monthly payments can be as low as \$66.05 a month.

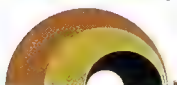
Pay off the loan in one year at a low interest rate of only 9.00% APR. Or 10.52% APR for a three-year loan.

It still pays to have an IRA. Don't let a little thing like money prevent you from getting one.

Here are current rates for a \$2,000 loan.	
1 YEAR	3 YEAR
9.00%	10.52%
Annual Percentage Rate	Annual Percentage Rate
12 monthly payments of \$175.91*	36 monthly payments of \$66.05*
*Single Credit Life Insurance included in monthly payment and is optional.	Rate is blend of 9.00% APR for the first year and 12.50% APR for the remaining 2 years.

Call the First Hawaiian IRA HOTLINE (525-5766) for the latest rates. On neighbor islands, toll free, dial "0" and ask for Enterprise 6106.

Substantial penalty for early withdrawal of an IRA. IRA Loan applicants must meet IRA eligibility requirements. IRA Loan program ends April 15, 1987. Call or stop by any First Hawaiian branch to apply.



FIRST HAWAIIAN BANK

We say yes to you.

Member FDIC

APRIL 1987
VOL. 46, NO. 4

Hawaii MEDICAL JOURNAL

Hawaii medical journal
UCSF LIBRARY
Received on: 04-29-87

CONTENTS

FROM THE PRESIDENT 112
Walter W.Y. Chang, MD

EDITORIALS: 112
Sports Medicine
J.I. Frederick Reppun, MD

A Personal Account
J.I. Frederick Reppun, MD

LETTERS TO THE EDITOR 116
Re: Malpractice Insurance Costs

CONFERENCE COMMENTS 116
Bioethics
F.C. Atienza, MD

HMJ REQUIEM: 117
Robert D. Millard, MD, 1898-1986
J.I. Frederick Reppun, MD

HMA'S 1986 SPORTS SYMPOSIUM: 121
A SUCCESS
Glenn D. Beachy, ATC

**ATHLETIC TRAINER FEELS PUBLIC AWARENESS
IS KEY TO PREVENTIVE MEDICINE IN SPORTS:** 122
An Interview with Pete Howard
Ardrey Inc.

A CASE REPORT: 124
LYMPHOCUTANEOUS SPOROTRICHOSIS
Sukchai Satta, MD

MY MANA'O 127
J.I. Frederick Reppun, MD

**MEETING AND GREETING OUR STATE
DECISION-MAKERS** 128

NEWS & NOTES 130
Henry Yokoyama, MD

OVER THE EDITOR'S DESK 137
Stephen R.P.K. Brady, MD



U OF CA-SAN FRANCISCO
THE LIBRARY
ACQUISITIONS DIVISION
SAN FRANCISCO, CA 94143



Frank E. Ceccarelli, M.D.,
Urology



Susan H. Chapman, M.D.,
Obstetrics/Gynecology



Bernard Fong, M.D.,
Cardiology



Alvin Furuike, M.D.,
Pulmonology



Thomas Y. Ito, M.D.,
Urology



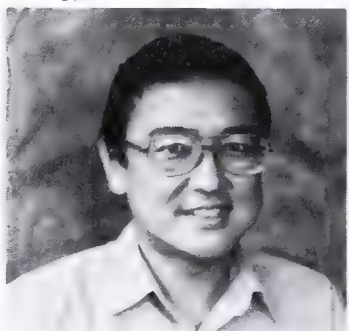
C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



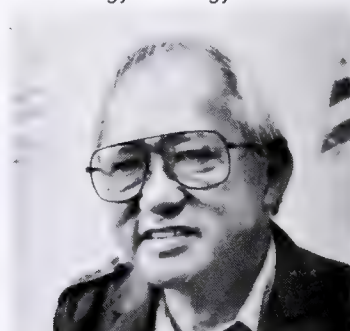
James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



Paul I. Sunahara, M.D.,
Dermatology

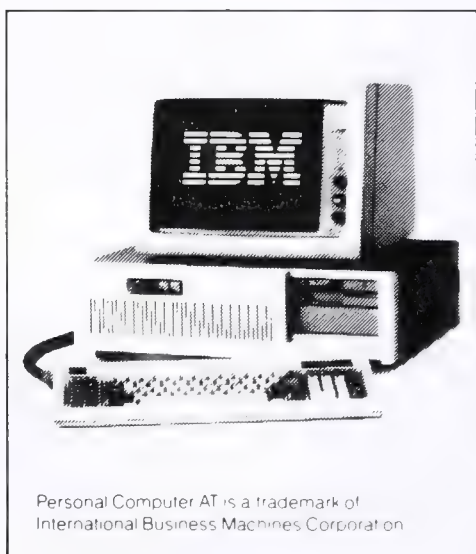


Henry L. Yim, M.D.,
Pediatrics

What do these doctors have in common?

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**



Personal Computer AT is a trademark of
International Business Machines Corporation

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary.

140

130

120

110

100

90

80

70

60

50

40

30

20

10

0

In mild to moderate hypertension

**THE FIRST
ONCE DAILY**

**CALCIUM
CHANNEL
BLOCKER...**

NEW
ONCE DAILY



ISOPTIN[®] SR^{*}

(verapamil HCl/Knoll)

240 mg scored, sustained-release tablets



JAMES B.

38, black male, heavy smoker. Prescribed a diuretic by another physician last year for hypertension.

YOUR CONCERNS

Presents with "smoker's cough." Workup reveals a BP of 150/107.

A LOGICAL CHOICE FOR CONTROL OF HIS BP

ISOPTIN[®] (verapamil HCl/Knoll) because...

- Black hypertensives often have low plasma renin activity and generally do not respond favorably to beta blockers.
- Beta blockers may increase the likelihood of bronchospasm.

ALICE W.

65, diabetic, overweight. Her BP has elevated to 190/98.

YOUR CONCERNS

She's on daily insulin.

A LOGICAL CHOICE FOR CONTROL OF HER BP

ISOPTIN[®] (verapamil HCl/Knoll) because...

- Unlike most beta blockers and diuretics, ISOPTIN has no adverse effects on serum glucose levels.
- Unlike most beta blockers, ISOPTIN does not mask the symptoms of hypoglycemia.



THOMAS G.

70, asthmatic. In the past, BP adequately controlled with 25 mg hydrochlorothiazide daily.

YOUR CONCERNS

Today patient presents with symptoms of gout. Workup reveals high uric acid level, low serum potassium, and BP elevated to 180/98.

A LOGICAL CHOICE FOR CONTROL OF HIS BP

ISOPTIN[®] (verapamil HCl/Knoll) because...

- Unlike diuretics, ISOPTIN will not decrease serum potassium levels or elevate uric acid levels.
- Unlike beta blockers, ISOPTIN can be used safely in asthma and COPD patients.

JOHN K.

42, Annual physical uncovered diastolic BP of 102... confirmed on three successive office visits. Unresponsive to nonpharmacologic intervention.

YOUR CONCERNS

Salesman, spends many hours of his working day in car... total cholesterol level 300, HDL 35.

A LOGICAL CHOICE FOR CONTROL OF HIS BP

ISOPTIN[®] (verapamil HCl/Knoll) because...

- Unlike diuretics, ISOPTIN does not cause urinary urgency.
- Unlike either beta blockers or diuretics, ISOPTIN will not adversely affect his already seriously compromised lipid profile.
- Unlike with propranolol, fatigue and impotence are rarely reported.



**Antihypertensive therapy you
and your patients can live with**

*A product of Knoll research.

© 1986, BASF K & F Corporation

2538/2-87

Knoll Pharmaceuticals
A Unit of BASF K&F Corporation
Whippany, New Jersey 07981

BASF Group



Printed in U.S.A.
Please see adjacent page for brief summary.

In mild to moderate hypertension THE FIRST ONCE DAILY CALCIUM CHANNEL BLOCKER

Brief Summary

ISOPTIN® SR (verapamil HCl/Knoll) 240 mg scored, sustained-release tablets

CONTRAINDICATIONS: 1) Severe left ventricular dysfunction (see WARNINGS), 2) Hypotension (less than 90 mmHg systolic pressure) or cardiogenic shock, 3) Sick sinus syndrome or 2nd or 3rd degree AV block (except in patients with a functioning artificial ventricular pacemaker)

WARNINGS: **Heart Failure:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (see DRUG INTERACTIONS). Patients with milder ventricular dysfunction should, if possible, be controlled before verapamil treatment. Hypotension: ISOPTIN (verapamil HCl) may produce occasional symptomatic hypotension. Elevated Liver Enzymes: Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Periodic monitoring of liver function in patients receiving verapamil is therefore prudent. Accessory Bypass Tract (Wolff-Parkinson-White): Patients with paroxysmal and/or chronic atrial flutter or atrial fibrillation and a coexisting accessory AV pathway have developed increased antegrade conduction across the accessory pathway producing a very rapid ventricular response or ventricular fibrillation after receiving intravenous verapamil. While this has not been reported with oral verapamil, it should be considered a potential risk. Treatment is usually D.C.-cardioversion. Atrioventricular Block: The effect of verapamil on AV conduction and the SA node may cause asymptomatic 1st degree AV block and transient bradycardia. Higher degrees of AV block, while infrequent (0.8%), may require a reduction in dosage or, in rare instances, discontinuation of verapamil HCl. Patients with Hypertrophic Cardiomyopathy (IHSS): Although verapamil has been used in the therapy of patients with IHSS, severe cardiovascular decompensation and death have been noted in this patient population.

PRECAUTIONS: Impaired Hepatic or Renal Function: Verapamil is highly metabolized by the liver with about 70% of an administered dose excreted in the urine. In patients with impaired hepatic or renal function verapamil should be administered cautiously and the patients monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacological effects (see OVERDOSAGE).

Drug Interactions: Beta Blockers: Concomitant use of ISOPTIN and oral beta-adrenergic blocking agents may be beneficial in certain patients with chronic stable angina or hypertension, but available information is not sufficient to predict with confidence the effects of concurrent treatment in patients with left ventricular dysfunction or cardiac conduction abnormalities. Digitalis: Clinical use of verapamil in digitalized patients has shown the combination to be well tolerated if digoxin doses are properly adjusted. However, chronic verapamil treatment increases serum digoxin levels by 50 to 75% during the first week of therapy and this can result in digitalis toxicity. Upon discontinuation of ISOPTIN (verapamil HCl), the patient should be reassessed to avoid underdigitalization. Antihypertensive Agents: Verapamil administered concomitantly with oral antihypertensive agents (e.g., vasodilators, angiotensin-converting enzyme inhibitors, diuretics, beta blockers, prazosin) will usually have an additive effect on lowering blood pressure. Patients receiving these combinations should be appropriately monitored. Disopyramide: Disopyramide should not be administered within 48 hours before or 24 hours after verapamil administration. Quinidine: In patients with hypertrophic cardiomyopathy (IHSS), concomitant use of verapamil and quinidine resulted in significant hypotension. There has been a report of increased quinidine levels during verapamil therapy. Nitrates: The pharmacologic profile of verapamil and nitrates as well as clinical experience suggest beneficial interactions. Cimetidine: Two clinical trials have shown a lack of significant verapamil interaction with cimetidine. A third study showed cimetidine reduced verapamil clearance and increased elimination to 1/2. Anesthetic Agents: Verapamil may potentiate the activity of neuromuscular blocking agents and inhalation anesthetics. Carbamazepine: Verapamil may increase carbamazepine concentrations during combined therapy. Rifampin: Therapy with rifampin may markedly reduce oral verapamil bioavailability. Lithium: Verapamil may lower lithium levels in patient on chronic oral lithium therapy. Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no evidence of a carcinogenic potential of verapamil administered to rats for two years. Verapamil was not mutagenic in the Ames test. Studies in female rats did not show impaired fertility. Effects on male fertility have not been determined. Pregnancy (Category C): There are no adequate and well-controlled studies in pregnant women. ISOPTIN crosses the placental barrier and can be detected in umbilical vein blood at delivery. This drug should be used during pregnancy, labor, and delivery, only if clearly needed. Nursing Mothers: ISOPTIN is excreted in human milk, therefore, nursing should be discontinued while verapamil is administered. Pediatric Use: Safety and efficacy of ISOPTIN in children below the age of 18 years have not been established.

ADVERSE REACTIONS: Constipation 8.4%, dizziness 3.5%, nausea 2.7%, hypotension 2.5%, edema 2.1%, headache 1.9%, CHF/pulmonary edema 1.8%, fatigue 1.7%, bradycardia 1.4%, 3° AV block 0.8%, flushing 0.1%, elevated liver enzymes (see WARNINGS). The following reactions, reported in less than 1.0% of patients, occurred under conditions (open trials, marketing experience) where a causal relationship is uncertain; they are mentioned to alert the physician to a possible relationship: angina pectoris, arthralgia and rash, AV block, blurred vision, cerebrovascular accident, chest pain, claudication, confusion, diarrhea, dry mouth, dyspnea, ecchymosis or bruising, equilibrium disorders, exanthema, gastrointestinal distress, gingival hyperplasia, gynecomastia, hair loss, hyperkeratosis, impotence, increased urination, insomnia, macules, muscle cramps, myocardial infarction, palpitations, paresthesia, psychotic symptoms, purpura (vasculitis), shakiness, somnolence, spotty menstruation, sweating, syncope, urticaria. Treatment of Acute Cardiovascular Adverse Reactions: Whenever severe hypotension or complete AV block occur following oral administration of verapamil, the appropriate emergency measures should be applied immediately, e.g., intravenously administered isoproterenol HCl, levarterenol bitartrate, atropine (all in the usual doses), or calcium gluconate (10% solution). If further support is necessary, inotropic agents (dopamine or dobutamine) may be administered. Actual treatment and dosage should depend on the severity and the clinical situation and the judgment and experience of the treating physician.

OVERDOSAGE: Treatment of overdosage should be supportive. Beta-adrenergic stimulation or parenteral administration of calcium solutions may increase calcium ion flux across the slow channel, and have been used effectively in treatment of deliberate overdosage with verapamil. Clinically significant hypotensive reactions or fixed high degree AV block should be treated with vasopressor agents or cardiac pacing, respectively. Asystole should be handled by the usual measures including cardiopulmonary resuscitation.

Knoll Pharmaceuticals
A Unit of BASF K&F Corporation
Whippany, New Jersey 07981



BASF Group

©1986, BASF K&F Corporation

2474/11/86

Printed in U.S.A.

Hawaii Medical Journal

(USPS 237-640)

Published Monthly for the
HAWAII MEDICAL ASSOCIATION
(Incorporated in 1856 under the Monarchy)
320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD
Founding Editor: HARRY L. ARNOLD JR., MD
News Editor: HENRY N. YOKOYAMA, MD
Assistant Editor and Book Review Editor:
DOUGLAS G. MASSEY, MD
Contributing Editors: STEPHEN R.P.K. BRADY, MD,
FRANCIS H. FUKUNAGA, MD,
CHARLES S. JUDD, JR., MD,
Managing Editor: CHARLOTTE BEAL
Editorial Assistants: BECKY KENDRO,
JUDI KINGREY
Copy Editor: GWENDOLYN CHANG HULLEMAN
Graphic Artist: J. CHARLES DAVIS
Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,
THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,
JAMES LUMENG, MD, FRANCIS D. PIEN, MD
Publications Committee: CHARLOTTE M. FLORINE, MD
(Commissioner)
HENRY N. YOKOYAMA, MD
(Chairman)
STEPHEN R.P.K. BRADY, MD,
NATHANIEL P.H. CHING, MD,
FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,
JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,
JAMES P. MCGUIRE, MD,
DAMKERNG PATHOMVANICH, MD,
ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,
J.I. FREDERICK REPPUN, MD,
TERRY C.Y. WONG, MD,
SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD
President-Elect: JAMES LUMENG, MD
Past President: RUSSELL T. STODD, MD
Secretary: JOHN H.C. KIM, MD
Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD
Honolulu: JOHN T. McDONNELL, MD
Kauai: THOMAS GROLLMAN, MD
Maui: HELEN S. PERCY, MD
West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD
CALVIN C.M. KAM, MD
Alternate Delegates to AMA
WALTER W.Y. CHANG, MD
RUSSELL T. STODD, MD


Advertising Representatives

CROSSROADS PRESS, INC.
Post Office Box 833
Honolulu, Hawaii 96808
Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.
16 Bruce Park Avenue
Greenwich, Connecticut 06830
Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.



Sshh. Come a little closer.

Meet one of our undercover agents.

You see, Leinaala Mau does most of her best work behind the scenes.

As a business sales center representative, she's constantly on the prowl, looking for ways to improve your business communications.

Sometimes, it means tracking down the right new equipment.

Sometimes, it means stepping in to investigate and solve a problem.

And sometimes, it's just checking up on the current system.

"Whatever it takes, that's what I do. I have to think fast, move faster, and be extremely resourceful. Saying it can't be done just isn't an option."

If you'd like to know someone's constantly watching out for your communication needs, you'll appreciate Leinaala's coverage.

Even if all you ever see . . . are the results.

HAWAIIAN TEL **GTE**

Beyond the call

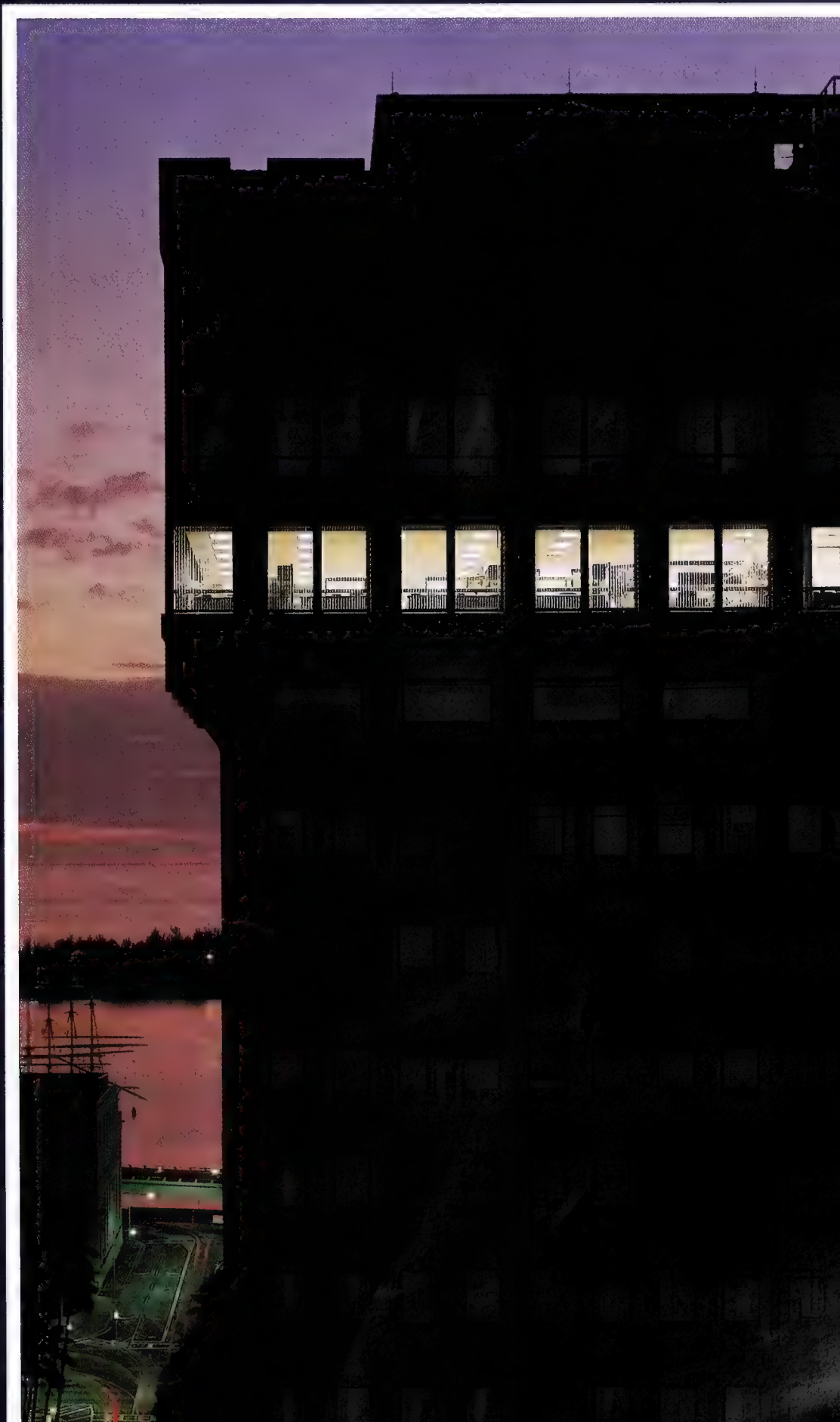
WITH A PERSONAL NET WORTH OF \$300,000 YOU CAN MOVE UP TO A PRIVATE OFFICE IN THE PENTHOUSE

When you have substantial assets, or an annual income of more than \$75,000, the highest level of banking service is essential.

Welcome to the Private Financial Services Group. Here, on the 20th floor of Bancorp Tower, you and your own PFS Officer work one-on-one. Saving you time by coordinating your banking, investment and personal trust activities. Drawing on the knowledge of specialists throughout Bancorp Hawaii. Making the most of financial and investment opportunities in a timely, strictly confidential manner.

It's personal, team banking. To make an appointment at one of our convenient PFS locations, call 537-8646.

The Private Financial Services Group
Only from Hawaii's leader





FROM THE PRESIDENT

Cutting Cancer Risk

As part of the campaign for a healthier and longer-lived America, the National Cancer Institute (NCI) has formulated a report, "Cancer Control Objectives for the Nation: 1985-2000."

The NCI feels that (1) Cancer deaths can be cut in half by the year 2000, and (2) this goal can be attained with present, available methods.

The two major plans of attack are (1) stop smoking, and (2) dietary changes. This month, I'd like to discuss dietary changes. I will address the many issues surrounding smoking in a future President's Message.

Recommended dietary changes include:

1—Limit dietary fats to less than 30% of all calories consumed.

2—Increase fiber intake through increased consumption of fresh vegetables, fruits and grain.

3—Increase consumption of Vitamin A (Carotene) containing foods, as well as cruciferous vegetables (cabbage, broccoli, cauliflower).

4—Avoid or eat minimally smoked, salted or nitrite-cured foods.

5—Reduce cholesterol in rich foods.

Other measures include minimal alcohol consumption, weight reduction, prudent exercise and cancer screenings.

We physicians need to be in the vanguard in the promotion of good health and the prevention and treatment of cancer in our patients. Only through our efforts and the efforts of other concerned groups can this critical goal be accomplished.

Walter W.Y. Chang, MD
President



Sports Medicine

In this issue is an attendee's report on the HMA's Sports Symposium in midsummer of 1986. It was a very successful event that drew a large attendance of people who have everything to do with the sports programs in and outside our schools. HMA's Sports Committee chairman Tim Olderr deserves a lot of credit for organizing it.

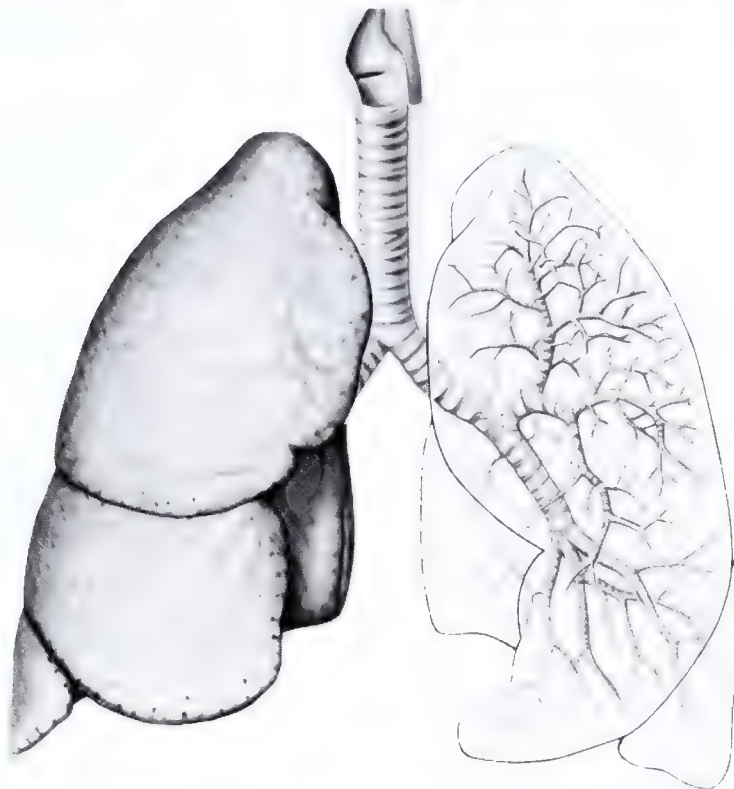
We have also received, and do feature an article that is both complementary and complimentary; complementary in the sense of emphasizing the safety factor so important in the athlete's equipment, and complimentary in that it features Athletic Trainer, Certified, (ATC) Pete Howard of Punahou School. The

article came to us from Ardrey Inc. of Menlo Park, N.J., on behalf of its client Arlon Products, a division of the Keene Corp., Santa Ana, Calif., purveyors of athletic equipment.

Also in existence and meeting monthly is the Hawaii Athletic Trainers Association. Howard is its president. Eric Okasaki is vice president, Glenn Beachy secretary, and Jayson Goo treasurer. Its members are all ATCs. At the University of Hawaii, Manoa campus, in the men's department, are Okasaki, head trainer, assisted by Goo, with students Derek Kimura, Cindy

(Continued on page 115)

Consider the causative organisms...



Ceclor[®]
cefaclor

250-mg Pulvules[®] t.i.d.
offers effectiveness against
the major causes of bacterial bronchitis

Haemophilus influenzae*, *H influenzae*, *Streptococcus pneumoniae*, *Streptococcus pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Note: Ceclor[®] is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Ceclor[®] (cefaclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Contraindications: Known allergy to cephalosporins

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-

associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it
- Prolonged use may result in overgrowth of nonsusceptible organisms
- Positive direct Coombs' tests have been reported during treatment with cephalosporins
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor

penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%, usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis, elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly)

© 1986, ELI LILLY AND COMPANY 1060485(LR)

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630



600332



High Performance from Pacific Basin Investments

109.3%

NOMURA PACIFIC BASIN FUND

- 109.3% return for shareholders since the fund's inception.*
- Experienced professional management by Nomura Capital Management, Inc., an affiliate of The Nomura Securities Co., Ltd., the world's largest securities firm.
- The Fund's objective is long-term capital appreciation of investments in the emerging economies of Pacific Basin countries.
- No sales charge.
- No redemption charge.
- \$20,000 minimum investment.

* Total return (July 8, 1985 to August 31, 1986) based on change in share price, reinvestment of dividends and capital gains distributions. Favorable currency exchange rates during this period contributed significantly to the total return. Past performance is no guarantee of future results.

For more information about the Fund, including charges and expenses, call the number below or mail the coupon for a free prospectus. Read the prospectus carefully before investing or sending money. Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.



(808) 538-3837

Persons-in-charge:

Call Sharon Kaya or Russell Oki



NOMURA SECURITIES INTERNATIONAL, INC.

Honolulu Office: (808) 538-3837

Persons in Charge: Sharon Kaya & Russell Oki

1001 Bishop Street, Pacific Tower, Suite 2760, Honolulu, HI 96813

Please send a prospectus detailing the Nomura Pacific Fund, Inc.

Name _____

Address _____

City _____

State _____

Zip _____

Business phone () _____

Home phone () _____

Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.
Member SIPC

HMJ

Price, Ray Oshiro and Matt Martinsan, all having been certified just recently; the UH women's program has Melody Toth as head trainer, with Dawn Kurihara assisting.

Presiding at the Hilo campus is Linda Rowan. Charlie Gima is head trainer at Iolani. At the Kamehameha Schools, Chris Balske is the trainer; Beachy is in the Physical Education Department. Wes Spahr, who is in the Sports Medicine Department at Straub, has been serving as trainer at St. Louis and for Pac-5. Out at BYUH is newcomer David Slack. This probably lists all the ATCs in Hawaii.

One can see at a glance that the private high schools in the ILH are well-served by these paramedical specialists, with the exception of Damien. Except for UH, there is a sad lack of such people in the state's public school system. The main reason for this, of course, is the cost of hiring.

HMA's thrust in sponsoring the 1986 midsummer symposium and the upcoming April 26 Lederle Symposium on Sports Medicine is to bring in and train the people in the public school system and the community who, as teachers, often do double-duty as "first aiders" at athletic contests (including the coaches). Of course, this also applies to the many coaches outside the DOE, such as Little League, Pop Warner, etc.

HMA hopes to provide continuing medical education in terms of health and safety to all those in the community who are interested in athletic sports.

J.I. Frederick Reppun, MD
Editor

A Personal Account

Nurses: God bless 'em!

Every doctor of medicine should, if he could accept the risk, have the telling experience of being injured and ill and in the hospital. He would become a better doctor as a consequence, and would develop a greater respect for and appreciation of our nurses.

Ye editor has had that experience recently, after having been in practice nearly 50 years. The reader can be assured that that experience "stopped the clock" for far too many days and weeks for an impatient patient to be able to tolerate without a generous helping of O.W. Holmes' *Aequanimitas*; this patient also should receive CME credits for a course in direct patient-care by nurses and ancillary personnel.

There probably isn't one of us who hasn't suffered a greater or a lesser "hurt" in one's lifetime. This physician recalls a first, when he was unconsolably deprived of going to meet his parents returning from several days away, because he had a "non-hurting," mild case of scarlet fever at age 4. The "hurt" was never kissed away, and it was of the psyche and not the soma.

Next, as a teenager, while taking a hefty swipe at an *Agapanthus* stem with a kitchen knife, it was deflected onto his volar wrist, cutting open a vein. No big thing. A small hurt, but while washing off the blood at the kitchen sink, he was surprised to find himself on the floor looking up at his bemused physician-father, who had come in and found the lad in a dead faint.

There were other, minor but memorable, episodes: Lacerations sutured under local; a finger boil lanced without local anesthesia. One experience as a medical student taught him early what it felt like to have a buzz-saw chew up and compound fracture a thumb and index that were initially treated in an ER with a generous application of Tr. Iodine, *before* anesthesia, that nearly sent him flying out through the ceiling (he has had a

personal empathy ever since with patients with wounds). Not only did the iodine *not* sterilize the wound, but it killed so much viable tissue that infection set in and the summer was spent traveling to and from the doctor's office 25 miles away, to suffer the agony of having "proud flesh" burned away at each visit. That was indeed a "learning" experience for a would-be doctor.

A war-time pneumonia and confinement in an O₂ tent within an overseas jungle army hospital is recalled by hearsay only, because there was an amnesia for the most critical 10 days when the sulfapyridine administered was an experimental and toxic drug. But it helped, maybe. Ninety-nine percent of the credit for recovery was freely given to the devoted care by career nurses of the ANC in a station hospital, whose medical officers risked jail for stealing ice from ships in the harbor several miles away, in order to keep the O₂ tent going.

This is all preliminary to the ultimate experiential lesson learned.

This threescore and 10-plus physician whose age outran his good sense, found himself in a hospital and sampling its services — primarily supportive and nursing services.

It wasn't a matter of illness. No fever. Only a mild metabolic upset. It was of a matter of recuperation from the jarring shock of a 190-pound missile of flesh and bone meeting up with an immovable object, namely hard-packed earth and stones. The result: Compression fractures of 2 lumbar vertebrae.

The essential element was pain. A girdling pain, several somata wide. The kind of pain that is a deep-seated ache with knife-jabs on the slightest movement, partially paralyzing abdominal functions, causing muscles to go into spasm in an attempt to rigidify and immobilize the trunk, allowing only short shallow breathing, nauseating, impossible to suppress groans, which truly do relieve. A scientific observation: Blood pressure gradually rose over the first few days, then subsided as the first, barely discernible improvement began, as did the tachycardia and the tachypnoea. The least bodily exertions or normal functions — a tilt-table e.g. — caused hypersalivations ad nauseam and a vaso-vagal light-headedness. Food and drink? Perish the thought, again ad nauseam.

The endorphins in the brain go on a rampage. Pain is not only a physical phenomenon; it affects the mind, too. Thoughts become nightmarish. Fantasy — horrible, persistently recurring fantasies — shoot off tangentially from ordinary cognition based on the concerns over possible outcomes, possible complications. What really did "break"? How extensive is the hematoma? Will there be a neurological deficit? Ghouls and goblins appear. Vampires suck blood. Mountain precipices and crevasses threaten. One awakens in a cold sweat of dread, but the relief of reality wells up, too.

The relief and blessing after demerol with phenargan i.m. is heavenly, otherwise indescribable the first few days. Thereafter, it was not needed, after the interval between doses increased. Propoxyphene with acetaminophen? Great! "Aspirin is just as effective," say the detractors. Poppcock! The statisticians haven't experimented on themselves! D-cet-N-100 four to five times a day made living and resting once more hopeful.

But, the basic, the underlying therapeutics came from the nurses. Their mere intermittent presence, their quick response to a call, relieved the agony of constant pain.

A nurse, is a nurse, is a nurse, whether RN or LPN or NA. She is female. It is not to decry men as nurses because they can be equal or better. But nursing is a female profession, it is the tenderness, the sympathy, the empathy, the TLC of a woman

that is the essence of nursing. Some women have rough, hard hands, but most of them have the hands that soothe, the voices that reassure, the image of Florence Nightingale.

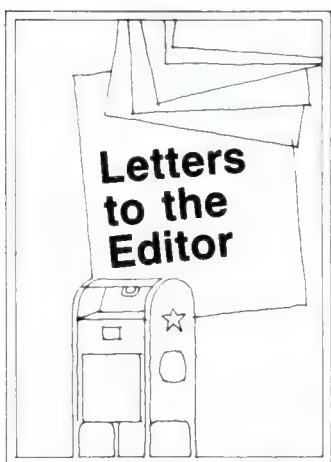
The distinctions between the various casts are irrelevant when it comes down to patient care.

Our physician-as-patient recognized the difference between individuals rather than between an RN and an LPN. Contact was mostly and most intimately with the latter for obvious reasons of hierarchy on the floor — but a boss-lady of the whole establishment once gave him a backrub herself and said she preferred to do that while ignoring the paging system. A true nurse.

Of course there must be the charge-nurse, the supervisor, the supernurse in CCU, e.g., but as far as making the patient feel well or get better is concerned, as far as making a patient in the hospital appreciate that hospital is concerned, it is the laying on of hands by the nurses — the bed baths, the straightening of the sheets, the hypos — yes, even the horrible ememata and bedpans — the heavenly backrubs that leave the most lasting impression of TLC.

The nurses, all. God bless 'em.

J.I. Frederick Reppun, MD
Editor



RE: Malpractice Insurance Costs

I have been a member of the Hawaii Medical Association since 1978. I am appalled at what has happened to the medical profession regarding increased malpractice insurance costs and the clandestine operation of the Medicaid Fraud Control Unit and its devastating effects on both providers as well as recipients.

I think it's high time we physicians retaliate. I can think of no better way than the old "eye for an eye and a tooth for a tooth."

Hence, I would like to recommend that whenever any of our membership have occasion to treat a lawyer, politician, bureaucrat or any member of their family, that we charge them a hefty upfront retainer fee with no guarantee that they will get any of it back after our examination and treatment.

For example, uncomplicated pneumonia may be worth only \$500 while heart disease may bring up to \$10,000.

I am sick and tired of attorneys who can charge whatever they think we, the public, will pay.

If you contact the Hawaii Bar Association, you will find that

lawyers are not regulated by DRGs, that they do not have CPT procedure codes and assigned or customary charges. They can charge whatever they want. There are absolutely no regulations.

Carol A. Brown, MD



Bioethics

"What you do with your ova or sperm ought to be your own business, but what about the zygote you contributed to — who has the right to that?" "Should a female be required to undergo certain procedures to benefit the fetus?" "And what do you do with a small (e.g. 500-gram) infant in the delivery room?"

These are a few of the intriguing questions raised by William Weil, Jr., professor of pediatrics at Michigan State University and chairman of the American Academy of Pediatrics Bioethics Committee, in a conference on ethical issues regarding care of disabled newborns held at Kapiolani Women's and Children's Medical Center on Jan. 12, 1987.

In the case of the very small premature infant in the delivery room, "to administer no treatment is the height of medical chauvinism. It also prevents the parents from exercising their right to a decision. The prevailing practice is to resuscitate, and decide later," said Weil.

According to Weil, the final "Baby Doe" regulations extended the meaning of the term "medical neglect" to include "the withholding of medically indicated treatment from a disabled infant with a life-threatening condition." It also designated the State Child Protective Agency as the proper body to see that no infant is the victim of medical neglect. There are three exceptions, each sufficient in itself, where the withholding of treatment "other than appropriate nutrition, hydration or medication" is not "medical neglect": (1) when the infant is chronically and irreversibly comatose; (2) when the providing of such treatment would merely prolong dying and not be effective in ameliorating or correcting all of the infant's life-threatening conditions, or otherwise be futile in terms of survival of the infant; or (3) when the provision of such treatment would be virtually futile in terms of the survival of the infant and the treatment itself under such circumstances would be inhumane.

A mechanism that would aid physicians, parents and hospitals dealing with bioethical issues affecting newborns is the establishment of Infant Care Review Committees within the hospital system. Hawaii was first in the nation in establishing a state ICRC through the Hawaii Medical Association and the local chapter of the American Academy of Pediatrics. Weil's visit to consult on Hawaii's compliance with Baby Doe regulations was made possible through the Ad Hoc Committee on Infant Care Review of the HMA.

F.C. Atienza, MD
Chief of Pediatrics,

Kapiolani Women's and Children's Medical Center

HMJ Requiem:

Robert D. Millard, MD, 1898-1986

Bob Millard died on the 24th of September 1986 at Hale Nani Nursing Home where he had lived for three months in declining health. While there, he was visited daily by his faithful office nurse, Dorothy (Mrs. Masao) Sumimoto, and by his old friend Myrtle Schattenberg, RN, widow of Dr. Schattenberg, who did so in order to give Dorothy some respite occasionally.

The life of this beloved general practitioner was devoted solely to his vocation. The reader may read once again and contemplate the remarkable biography written on the occasion of his being extolled by the Hawaii Academy of Family Practice for having practiced medicine for 50 years, nearly all of it in the Hawaiian Islands. That was Dec. 2, 1972, mind you! Fifteen years ago! It is so remarkable, that we publish it once again, so that the medical generations that follow can marvel at his simple, total dedication to the service of humanity.

After 1972, Bob continued to practice office medicine in the Alexander Young Building where he had been for years, until it was demolished in 1979. One would have thought that 57 years in harness would have been enough for any man. However, Bob kept on; he remodeled and occupied a new office in the Investors Finance building, across on the mauka side of Hotel St., where he continued to see ailing or injured Merchant Marine seamen in transit.

In 1982, he was forced out once more by the landlord who had other plans for the place. Bob then finally called it quits — after 60 years of practice! What a record of service to his patients!

Dorothy Sumimoto had started nursing for Bob in 1931. A widower since his wife, Pat, died in 1975, Bob invited the Sumimotos to come live with him in his Pacific Heights home and help care for him after his retirement. He lost his zest for living, however, when he could no longer practice medicine. He was physically active for a while and enjoyed being taken to the Outrigger Canoe Club in Waikiki on weekends, to swim and then have dinner.

The Sumimotos also took him for the first time ever to the Ala Moana Center and he enjoyed that. Later, a one-year trial of attending the Kuakini Day Care Center ended when he lost all interest in being there as a patient. Finally it became rather impossible to care for him as he became weaker and more unsteady on his feet at home, so he was admitted to Hale Nani for his last days.

Bob Millard was 88 when he passed on, leaving no issue and no remaining relatives; only friends, patients and colleagues who respected and loved him. His medical life of service covered nearly the whole of the 20th century.

—J.I. Frederick Reppun, MD, Editor

Fifty years ago a young man started his career earning \$100 a month as an intern at Queen's hospital. (Today, in 1972, a QMC intern may get as much as \$1,005 a month!) He was poor; he had no other source of income and he had worked hard to get himself through the University of Pennsylvania medical school. Even as a professional man, such a generous salary, plus his way out to Hawaii paid in full, was munificence indeed.

He was born in 1898 in east central Wisconsin. Antigo boasted a population of 500, and a "packet" store run by this young man's father. He had one brother. Even in grade school he dreamed of and firmly intended to become a doctor. Why? "I really don't know, except that I believed it was a humanitarian vocation," says he. He talked the school principal into letting him take more courses so he could finish high school in three years instead of four.

There were two years of the University of Wisconsin pre-med, and then two years of medical school at that institution — all that were offered in Madison in those days. Then came the transfer to the No. 1 medical school in the country — the University of Pennsylvania School of Medicine and finally his MD degree in 1922.

At that time, none of the university hospitals paid a house officer anything; he was supposed to be grateful to do scut work in exchange for an opportunity to learn at the feet of the great professors. Our young man figured there was no use applying for any of these internships. As the dean was addressing the graduating class and bidding it farewell, he casually mentioned that, as usual, Queen's hospital in Honolulu needed two interns. He mentioned the fabulous pay and perquisites offered.

Two young graduates nearly knocked each other over in the rush to the dean's office later. The other one was "Cully" Culpepper. There was also a third applicant, but his first choice was a position at the University of Michigan hospital. The dean suggested the three draw lots or settle it among themselves, as he didn't care to recommend any two out of the three. One can imagine with what apprehension that acceptance from Michigan was sweated out. It did come through! That left Cully and our boy free to set out for Honolulu.

What an adventure! The land of palm trees and hula maidens. They would even be working with naked nurses on the wards, they were told — with photos to prove it! The beautiful old curve of stately royal palms at the entrance to Queen Emma's Hospital. The flow of white stone steps below the entrance arch and awning — steps that served as the rendezvous of white, Palm Beach-suited staff doctors as they came and went on their hospital rounds.

Makai of the oval lawn below the palms there was angle parking for the Pearce-arrows, the Packards, and the Model-T Fords. The three-storied hospital had open, shaded lanais through which the breezes from the Koolaus could sweep unhampered into patients' rooms, gentle and healing of themselves. The first of July 1922.

Our young neophyte, together with interns Culpepper and Treadwell bought themselves a Ford and became acquainted with Oahu. (Treadwell later became a plantation physician in Kohala.) They worked hard, and played hard. A fellow intern was saved by fatherly C.B. Wood, MD, from being implicated

adversely when a young nurse the intern aborted (in self-defense, you might say) took the fetus wrapped in a newspaper, carried it on the trolley across the duck swamps to Waikiki from Pawaa junction, and stuffed it into an old stone wall — and was seen to do it, was followed and reported!

Anyway, the delightful year of internship came to an end all too rapidly. Our young man wanted more training, but all he was offered was a \$20-a-month residency at the New York Nursery and Child's Hospital at 10th and Amsterdam. He accepted, but it was not enough to live on. He sold a pint of his own blood for a much-needed \$50 but the direct transfusion donor-to-patient team withdrew 800cc instead of the proffered 500cc, and the poor medical donor was barely able to stagger up the stairs to his room and felt terrible for a week after!

Just two months into this residency, our man heard of an opening as psychiatric resident at the Boston Psychopathic Hospital. Even though he cared not a whit for psychiatry, the \$75 a month pay meant a full stomach; besides, Harvard professor and Chief McPhee Campbell was world renowned. The residency started the first of January 1924. At least he learned to do cisternal punctures, a favorite at that institution.

Before the end of that first month, our young resident got a telegram from Honolulu; Dr. Jimmy Judd wired: "Jim Dole starting pineapple operations on Lanai stop Needs a doctor stop Salary \$300 per month plus perquisites stop Will pay your way over stop."

By then, the cold, miserable, midwinter climate of Boston had seeped into our young doctor's bones and he just knew that McPhee's white-fringed bald pate, fiery red with rage though it might be, couldn't stop him from leaving for sunny Hawaii. Anyway, the professor's pate barely reached as high as our man's xyphoid.

Our hero spent nearly two years on Lanai. He landed in the dark of night, off-loaded from an interisland steamer onto a lifeboat and rowed in through the surf onto the sandy beach of Manele. J. Bloomfield-Brown was the manager overall: highly polished knee-high boots, riding crop, an eagle eye out for any litterbug and all.

There were three different operations going on: (1) The building of Lanai city at 1,700-foot elevation and preparing of the land for planting around the city, (2) the building of the road to, and (3) the building of Kaunalapau Harbor with breakwater, pier, and traveling cranes. In addition, there was the ranch under famed ecologist and ornithologist George C. Munro. The Gay family, the original owners of all of Lanai still resided there at that time.

Before going to Lanai, our man was introduced to Jim Dole and to Charles White (brother of Henry who later was president of Dole Pineapple for many years) who told him his first job would be to supervise construction of a hospital on Lanai. Confessing complete ignorance of such matters, he nevertheless drew up some rough sketches. These were given to Guy Rothwell, one of Honolulu's best-known architects, and four months later the 12-bed hospital opened its doors to patients.

Said Bloomfield-Brown: "Doctor, I want you to go to Honolulu and find yourself a capable nurse to run our hospital." The doctor did better than that. He went back to his home base at Queen's where he heard of a nurse who was temporarily stranded on her way from Seattle to Shanghai; she was out of funds and needed to work for a while.

This Pat Malloy was a red-headed RN from Iowa. He brought her back to Lanai, again off-loaded from an interisland ship onto a lifeboat. This time it was not at Manele, but into the new Kaunalapau Harbor, where the massive swells from Kona side surged around the new breakwater.

But, there was no pier as yet. Pat, undaunted, climbed onto a lowered skip, grabbed two of the four cables, one to each corner, and was then hoisted off the boat some 100 feet up the face of the cliff and deposited on the red soil of Lanai as if she had been a load of freight. This was in May of 1924. The two of them returned to Honolulu the end of the year and were married by the Rev. Palmer in old Central Union Church on New Year's Eve. Our hero had gotten himself a wife, and a nurse for Lanai!

The pineapple workers on Lanai were a mixture of Japanese and Filipino, except that they did not mix very well. The company had constructed two sets of sanitary facilities in each block. Each "set" consisted of a bath house and a group of outhouses of the Chick Sales variety. One was meant for the men in the block and the other for the women. Instead, the workers did it their way: One for the Japanese and the other for the Filipinos.

The young plantation physician did T&As and appendectomies and delivered the difficult as well as the easy confinement cases. Sometimes the power failed, and surgery had to be done by gas lantern. A young Japanese orderly was taught how to "drop ether," but the anesthesia was always induced by the doctor, using Chloroform.

And what did he do if a supervisor's child became apnoeic prior to a simple T&A? He sweat blood, did an anal divulsion, and prayed. Breathing returned. Usually, when the important people got appendicitis they would be shipped by sampan to Lahaina, thence to Puunene over rough roads by car to the surgeons available on Maui.

The doctor and his wife left Lanai late in 1925. After a visit home to Madison and to dissect cadavers and attend refreshing lectures, then a course in surgical anatomy in Philadelphia, he took a month of gynecological surgery at the New York post-graduate hospital. They thought of perhaps settling in Seattle, but license requirements were not propitious. An offer to work with surgeon Coffey in Oregon was tempting, but they went instead to Los Angeles where he did locum tenens and did surgical assisting and "passed gas" for the experience and the money.

Another letter from Hawaii started them back to the Islands. It was Treadwell in Kohala who needed someone to relieve him for six months, offering \$800 a month plus private practice minus expenses. Wealth at last! However, with it came a disease called "businessman's vertigo," and our man lost all his savings in rubber plantation stock fliers — all the rage in Honolulu stock market circles in those days!

After a brief tenure on Kauai where Nils Larsen's brother wanted a doctor to build him a hospital at a C. Brewer plantation, our man returned to the big city. Dr. Wayson, one of Hawaii's greats, a GP and leprologist with an office on Bere-tania at Punchbowl, offered him an association in partnership. This was in May 1928, a year later, however, and after several serious surgeries on himself, Wayson decided to give up private practice and go full time with the Board of Health.

Our man leased space on the top floor of the Hawaiian Electric Co. building and shared offices with Tom Mossman until the latter became full-time city physician under Mayor Wilson, and then with Pete Irwin. When the HECO lease ran out, our man moved to the Alexander Young Building where he has occupied the same office for 38 years.

Now, at the age of 74 years, he still holds office hours seven days a week; he still leaves home at 6 or 7 a.m. to make hospital rounds, and he returns home to supper at hours so variable that Pat shrugs it off unconcernedly. Much of his work now is as part-time U.S. Public Health Service physician. He used to

(Continued on page 123)

**You don't need
the biggest.**

You need the best.



Medical Insurance Exchange of California

**Professional Liability Exclusively
Owned by its insured doctors**

6250 Claremont Avenue, Oakland, California 94618-1324

Call MIEC's Honolulu Claims Office, 545-7231, or call toll-free 800-227-4527

Hundreds of products and services
to help you run your business better.

12th Annual

PACIFIC BUSINESS EXPOSITION

WEDNESDAY & THURSDAY

MAY 13 & 14, 1987

9:00 A.M. to 7:00 P.M.

Neal Blaisdell Exhibition Hall

ENTRY NEXT TO TICKET OFFICE



FREE ADMISSION
AT OUR REGISTRATION DESK

Sponsored by



**PACIFIC
BUSINESS
NEWS**

IN CONJUNCTION WITH TRADE SHOWS OF HAWAII

HMA's 1986 Sports Symposium: A Success

Glenn D. Beachy, ATC*

Sponsored by the Hawaii Medical Association, the Symposium on Sports Medicine at the Punahou campus on July 19, 1986, was one of the finest programs on the subject we have had in Hawaii. The nationally recognized faculty, along with numerous local physicians and specialists, provided information that is rarely available in a concentrated one-day conference.

The field of Sports Medicine is very large; to try to cover all areas in one day is impossible. This symposium limited its program to three tracts: Football, Running and The Designated Athletic Trainer. Over 350 people were in attendance.

Football

Designed for the benefit of local coaches, the Football Tract covered not only medical concerns but coaching techniques and practical skills to help attendees organize and coordinate their football programs. Don James, head football coach of the University of Washington, proved to be a very articulate spokesman for his profession. Practical information on skill assessment of the athlete, safety in coaching techniques, scouting, organization of the coaching staff and determining a game plan were areas that he covered.

It was very evident that James leaves little to chance in preparing his staff and players. The organization and detail of his material is extensive and will provide immediate assistance to coaches.

Jack Daniels, an exercise physiologist formerly with Athletics West and now at Cortland State University in New York, discussed off-season training and how it affects performance of the athlete in any sport. The preparticipation physical was handled by Dr. Thomas Cashman of Straub. Dealing with injuries and time loss was discussed by Dr. Stan Herring, team physician at the University of Washington.

The final area of discussion in football was the role of the athletic trainer in working with athletes, parents, coaches and physicians. This was presented by Mike Nesbitt, head athletic trainer at Northern Arizona University.

Distance Running

The symposium tract dealing with running was one of the most heavily attended, due not only to the faculty, but to the great number of runners in Hawaii who wanted to hear the latest information on their sport. Daniels, the physiologist with Athletics West, provided interesting information as he discussed

training strategies and environmental concerns for runners. The majority of his research has been conducted with elite runners but it is applicable to all runners.

His concepts of training, based on this research, stress that a runner need not attempt to improve with each training session. Slower-paced runs may actually improve one's conditioning and performance.

The lecture by Brian Clarke, a local independent running coach, also dealt with training and adaptation to work. Both of these men have spent a great deal of time developing their programs and believe that their method is a practical approach to improved performance.

Bev Bernal, a clinical nutrition coordinator with Kaiser Permanente Medical Care Program, presented useful advice on nutrition and dealt with the more blatant misconceptions that claim to enhance athletic performance. She also stressed the importance of fluids for runners and the need for calcium in women runners. Bernal could have used several sessions to deal adequately with the subject.

The remainder of the running tract focused on medical aspects. Herring of the University of Washington discussed the biomechanics of running, Dr. Robert Medoff of Straub, talked on musculoskeletal adaptation to training, and Dr. Tim Olderr, also of Straub, and Dr. Chet Nierenberg of the Honolulu Sports Medical Clinic discussed methods of preventing injuries and what to do when an injury has occurred.

Mickey Campaniello, health educator with the Kaiser Program, discussed the athlete's responsibilities regarding training and making a commitment to a sport. This particular lecture would be useful to give in the high-school setting.

The Designated Athletic Trainer

The third tract dealt with The Designated Athletic Trainer. As there are 16 Certified Athletic Trainers (ATC) in the State of Hawaii, and none in the public school setting, this tract was introduced to assist those individuals who have been assigned to provide medical assistance to the athletes in the school and at games.

Two lectures, one by Honolulu orthopedist Allen Richardson, MD, and another by Richard Troxel, athletic trainer at the University of Oregon, dealt with assessing injuries and determining the resulting functional impairment. An athletic trainer does not make a definitive diagnosis of an injury, but must be aware of the possibilities, make an educated assessment, and know procedures to follow in order to ensure that the injury is handled correctly.

Pat Ariki, physical therapist at Castle Medical Center, discussed injury rehabilitation, which is appropriate to the school

* Secretary, Hawaii Athletic Trainer's Association
Physical Education Department,
Kamehameha Schools

setting, with the approval of the attending physician. He stressed the fact that inappropriate exercises are sometimes advised after an injury, on the athlete's return to activity and before rehabilitation is complete.

Dr. Bernard Portner, an independent physiatrist, reiterated these points in his discussion on determining criteria for return to play.

The remainder of the athletic trainer's sessions were handled by certified athletic trainers. Mike Nesbitt discussed preventive and emergency equipment, which is necessary to provide adequate care for the injured athlete. Members of the Hawaii Athletic Trainer's Association then supervised taping sessions for all attendees. Most were able to experiment with the demonstrated taping techniques.

The driving force behind the symposium was Dr. Olderr, who also is chairman of the HMA Sports Medicine Committee as well as a sports medicine specialist at Straub. Along with the staff of the HMA, Dr. Olderr did a superlative job of organiz-

ing and coordinating the symposium. He and his committee members did an excellent job in defining topics and attracting experts to discuss each area.

Let's hope this is the first of many such workshops sponsored by the Sports Medicine Committee.

"Sports Medicine: A Symposium for Health Professionals" is the title of this year's Lederle Symposium scheduled for Sunday, April 26, 9 a.m. to 4:30 p.m. at the Westin Ilikai Hotel in Honolulu.

Geared to physicians and pharmacists, the conference is sponsored by Lederle Laboratory and co-sponsored by the Hawaii Medical Association, the Hawaii Pharmaceutical Association and the Hawaii Society of Hospital Pharmacists.

There is no fee for the symposium however preregistration is required. Call the Hawaii Medical Association at 536-7702 for information and registration.

. . . *kudos to the ATCs*

Athletic Trainer Feels Public Awareness is Key to Preventive Medicine in Sports

Athletic trainers rarely receive the recognition they deserve as providers of legitimate health care service. It is unfortunate that many people inside and outside the sports world regard a trainer's job as nothing more than taping ankles and ordering supplies.

Encouraging the public to view athletic trainers as "health care professionals" is the life-long goal of Pete Howard, athletic trainer at Punahou School, Honolulu, Hawaii.

"The whole idea behind consulting a trainer is to prevent injuries, by educating both players and coaches," says Howard. "In this day of lawsuits and liabilities, we can never be too careful. Even equipment manufacturers are doing their part to avert injury by designing safer apparatus."

Speaking from Experience

The Punahou trainer knows what he's talking about. With 15 years' experience as high-school trainer and instructor, Howard also advises professional and college-level players. He is one of the top athletic trainers at Hula Bowl games and is head training liaison for NFL teams at Pro Bowl games in Hawaii.

"I've seen severe injuries that could have been avoided, or at least the damage lessened," he adds. "That's why I feel our profession is so valuable. Trainers recommend treatment and reconditioning programs under direction of, and in cooperation with, team physicians."

Improved Products Offer Better Protection

Howard finds little difference between training Punahou students, college players and the pros. Basically, he utilizes the same techniques, methods and products at all three levels.

"Manufacturers of sports therapy products are becoming more responsive to the athlete's needs during training and actual play," he says. "It's simply not enough for a product to do what it's supposed to. Today, products must be more versatile. And that's important, especially where cost is concerned."

Howard cites APT Brand moleskin, manufactured by Arlon Division of Keene Corp., as one example. "When applied, the moleskin acts as a 'stirrup,' preventing common injuries, especially inversion sprains," he says. "Likewise, the APT Brand adhesive heel and lace pad not only serves its intended purpose, but also protects against blisters, corns and bruises. That kind of versatility improves physical protection and, more fundamentally, translates directly into a large budget savings for the Athletics Department.

"Of course, ways of applying the product on youngsters are going to differ from those applied on 275-pound professionals. But I do think the products today are better designed to protect and benefit any size or level player," he explains.

Advances at Punahou School

Since arriving at Punahou School in 1971, Howard has seen significant growth of interest in sports medicine among his students.

"Students were not only interested in playing the games, but in knowing what role I had. It just so happened that my job became overwhelming just as students expressed interest in learning about trainers. Considering the great athletic population at Punahou, I welcomed the challenge," he says.

As a result, Punahou School now offers three classes in sports medicine. One is geared toward the athlete and his or her body; another is basic anatomy and the third, an athletic training practicum.

"I designed the classes, pitched the idea to Administration and now teach all three. I'm proud of the fact that young adults are taking an interest in the field and I encourage both boys and girls to enroll," Howard says. "The training room was even changed to co-ed in 1972 in order to provide equal care for all and to help promote a professional approach to sports."

Training: A Growing Profession

After five years as a student trainer in high school, Howard matriculated at Indiana State University in 1966, where he studied under Mel Blickenstaff, grandfather of the athletic training curriculum. At the time, ISU was one of the first universities to have an accredited program in athletic training.

Today, approximately 45 colleges and universities nationwide offer sports medicine/athletic training degrees.

"Probably the most significant change since I began in the field is increased interest among women. All you have to do is attend one of our national conventions and see noticeable growth," he adds.

Health Care Professionals

Howard is one of many athletic trainers who consider themselves "health care professionals." Over the past few years, specific steps have been taken to alert the public to their role in sports.

The National Athletic Trainers Association (NATA) has its own testing board that issues certification to trainers. The testing process involves an extensive written and oral practical examination. There's also a continuing education program to ensure a trainer's continued certified status.

"Many people don't understand that there's a significant difference between treating a sprained ankle on an athlete and treating one on a non-athlete. What differs specifically is the determination as to when the athlete can safely return to activity," says Howard. "That's why follow-up testing, in the form of continuing education units, is necessary to keep us up-to-date on the latest techniques, procedures and rehabilitation."



Every athlete at Punahou School receives advice and treatment from school trainer Pete Howard. Educating players, coaches and parents on the importance of preventive medicine provided by trainers is Howard's goal.

Think "Professional"

His dedication to training may stem from the fact that Howard never had the start most youths experience in sports. He contracted polio at age 5, which eventually precluded him from playing most sports, except golf.

He thanks his dad, a football, baseball and basketball coach, for introducing him to a different aspect of sports.

"The great thing about this profession is that it enables those who can't play to become involved in another, equally important para-professional role," explains Howard. "This way, we share in the wins, losses and excitement, just as coaches and players do."

He realizes that to foster the idea of athletic trainers as "health care professionals" will take continued effort on the part of NATA to enforce certification standards.

"More important, we have to start educating the young and their parents. By setting proper examples and conveying a sense of pride in our work, everyone — players, coaches, trainers and parents — will be better off," he concludes.

From Ardrey Inc., whose client Arlon Products is a division of Keene Corp. of Santa Ana, Calif.

Robert D. Millard *(Continued from page 118)*

board all foreign ships coming into port with sick seamen aboard, but now they are brought to his office. Nevertheless, he is still a family physician and sees youngsters and oldsters.

He gave up obstetrics several years ago but still does some surgery. Why does he continue to work so hard and put in such long hours? "Because I love my work; Pat and I have no children nor any hobbies; if I quit or slowed down I would grow old rapidly!"

Our man has been a member of the Hawaii Academy of General Practice, now Family Physicians, since September 1951 when the chapter was chartered. He fulfilled the requirements for continued membership faithfully until he became "active exempt" in 1965. He is eligible for fellowship. He has served as an officer and committee member in the past but has always

declined the top spot.

It is the same with his membership in the Honolulu County Medical Society, where he has been on the Board of Governors and on many committees. We know him best as chairman of the Resolutions Committee. He has also been delegate to the HMA.

Perhaps that of which he is the most proud is his long service as chief of the department of General Practice at Queen's and member of the hospital's Medical Advisory Committee, from 1963 to 1971, and 1966 to 1971 he was vice chief of staff. Queen's has been his medical "home" for 50 years!

I give you Robert D. Millard, MD, a true GP devoted to his patients and to his profession. It is a privilege for the AAFP and particularly the Hawaii chapter to honor this fine colleague!

J.I. Frederick Reppun MD (Dec. 12, 1972)

A Case Report: Lymphocutaneous Sporotrichosis

Sukchai Satta, MD*

*Sporotrichosis is a subacute and chronic disease caused by the dimorphic fungus *Sporotrix schenckii*. The mycosis has been reported mainly in temperate zones or in the tropics.*

In Japan, sporotrichosis is the most common subcutaneous mycosis and over 2,400 cases were recorded.¹ In the U.S. sporotrichosis is an uncommon disease that is frequently occupational, being seen most commonly among farmers, gardeners, florists and nursery employees. Rose thorn is a rich source of the organism.

The following is a case report of lymphocutaneous sporotrichosis, the source, of which is believed to be aloe (a local Hawaiian plant).

Case Report

A 72-year-old man, a retired gardener, presented himself to the office with an ulcer on the dorsum of his right hand. A month prior to the office visit he accidentally burned himself with hot lard. Since then he was treating himself with Vaseline and aloe resin (by squeezing the aloe leaves to obtain the resins). The wound, when first seen, was cultured and biopsied and was then treated with Cefadroxil (Ultracel) per os and corticosteroid cream.

Ten days later he returned with a large, ulcerating lesion with a raised edge and an irregular base on the dorsum of his right hand with a diameter of 3 cm, with papulo-erythematous nodules along the dorsal aspect of the forearm (Fig. 1).

The culture grew staphylococcus species coagulase test negative. The biopsy under PAS stain showed small spores of yeast forms varying in size from the nucleus of a lymphocyte to one of the lobes of a polymorphonuclear cell; no hyphal forms were noted. Fungal culture was sent to a laboratory for a specific fungus study, which later on grew *Sporotrix schenckii*.

The patient was taken off Cefadroxil and started on incremental doses of saturated solution of potassium iodide, starting with 1 cc (1 gram) three times a day by mouth and gradually increased to 3 cc (3 gram) three times a day. The patient's case was followed closely in the office.

One month later the primary lesion and the papulo-erythematous nodules on the right forearm were much improved (Fig. 2). Seven weeks after such treatment, all of the lesions had completely disappeared (Fig. 3). The patient was ordered to continue the saturated solution of potassium iodine, 3 grams

three times a day, for two more weeks. There was some consequent gastric discomfort reported by the patient, but this required no treatment.



Figure 1: Primary lesion and lymphocutaneous nodules prior to treatment.

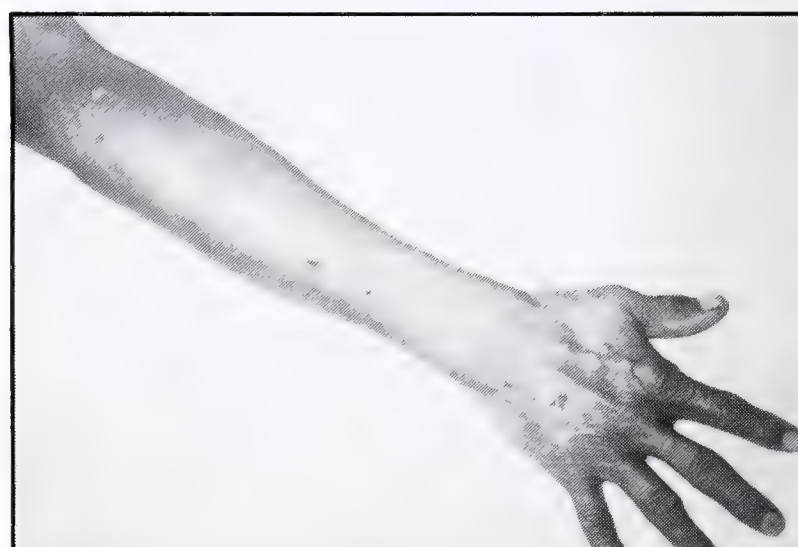


Figure 2: Primary lesion and lymphocutaneous nodules one month after treatment.

Accepted for Publication February 1987

*P.O. Box E
Kealahou, Hawaii 96750

(Continued on page 127)

REAL ESTATE OPPORTUNITIES

BEACHFRONT BARGAIN REDUCED AGAIN

\$189,000 FEE

Oceanfront **duplex** 4 bdrms, 1 bath PLUS 2 bdrms & 1 bath. Large deck fronting ocean; **sandy beach**; great chance to live on the ocean with a **rental unit** to help make the payments.

Call us today this won't last.
We specialize in
NORTH SHORE properties.

Marianne
Abrigo, Properties

P.O. Box 867, Haleiwa, Hawaii 96712 637-3511

STARK REALTY

Since 1968... over \$750 MILLION in sales
with a tradition of professional service and satisfied clients.

- Condominiums
- Land & Home Sites
- Waikiki
- Homes
- Rentals
- Honolulu
- Investments
- Property Management
- Outer Island

BUYING OR SELLING... CALL US FIRST



944-8744

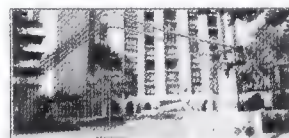


At Yacht Harbor Towers across from Ala Moana Shopping Center
1600 Ala Moana Blvd., Honolulu, Hawaii 96815

**TWO NEW PRECIOUS PROPERTIES...
AWAITS THE DISCRIMINATING BUYER!**



KAILUA: KUKILAKILA—a waterfront townhome development just 5 minutes from famous Kailua Whitesand beach! Charming old Hawaiian architecture has been updated for modern elegant living! Our spacious decorator's dream home of 3 bed 2-1/2 bath has 2200 sq. ft. under roof! 2 car auto-garage, 2 view decks, a garden jacuzzi, red wood decking and a private entry court! Resort style amenities — fish, boat, ski, etc. A true executive family home! (L) \$167,000 reduced to \$159,000. Call to see!



WAIKIKI: LILIUOKALANI GARDENS—a premier Tropical development fit for Royalty! One acre of verdant gardens, ponds, paths and play pavilion are yours when you own this beautiful one bed one bath apartment. Fully furnished, richly decorated with original artworks of Tropical theme and a breathtaking view of the Ala Wai Canal, Golf Course and the Manoa Mountain range. Come & join the great folks at this prestigious address! (L) \$195,000

Call CHU LAN or JOHN SHUBERT (R) FOR SHOWINGS



SHUBERT PROPERTIES INC. 538-3500

1188 Bishop Street, Suite 2001 • Honolulu, Hawaii 96813

MLS



HAIKU PLANTATIONS

ESCAPE HECTIC CITY LIFE... over 1 acre tranquil, verdant oasis in a secure, gated community nestled at the foot of the majestic Koolauas. 4 bedroom, upgraded home competitively priced at \$329,000 (L). Come listen to the gurgling stream!

Carol Chun (RA) 373-3851

dolman
associates inc
REALTORS
since 1957
531-6488

BAY VIEW

EXQUISITE NEW LISTING with country charm & gracious feeling. 3 Bdrms, 3 baths, family room, dining room, office—small pool — glorious view! Fee simple \$290,000

Joanie Evans (R) 235-1691

BAYFRONT

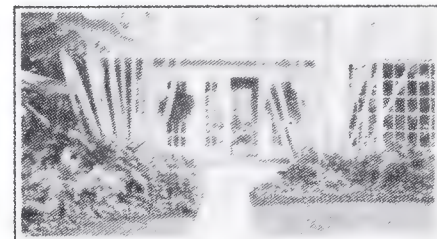
SPLENDID FEE SIMPLE ESTATE for the Yachtsman, in a superb location with breathtaking bay and mountain views, mature trees. Four bedroom, three bath home with dramatic details — high beamed ceilings, lava rock fireplace, deck. \$625,000

Andrey Hansen (R) 254-4666

WADE
LTD., REALTORS

25 KANEHOE BAY DRIVE
KAILUA, HAWAII 96734
Telephone 254-3521

A JEWEL ON THE AVENUE Kahala, that is!



French doors beckon you to explore this Kahala two-story mini mansion with 2 bedrooms, 2 baths and one-bedroom guest cottage, plus studio quarters. \$1,700,000.00. Fee Simple. MLS 30496. Shown by appointment only

Susan L. Burgess (RA) 734-4242

HILL & CO.

specialists in fine residential properties

HONOLULU

373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821



WATERFRONT IN HAWAII KAI

The house that has everything:
4 bedrooms, 3 baths...
Pool and cabana...
Boat dock, boat storage...
Hot Tub...
Solar water heating...
Central air...
Fenced yard... security...
New kitchen... and MORE...

Call for appointment. **\$379,000 (L)**

Spencer/Sewell Realty, Inc.

1585 Kapiolani Blvd. #1107

(808) 941-0511

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



WAIALAE IKI

Alaweo St. (Pictured) 4 bedroom, 3 1/2 bath home featuring 2 master suites, huge livingroom, formal dining room, 2 fireplaces, pool & spa. 12,262 sq. ft. rim lot with 270 degree view. Fee pending. (32883) \$750,000 (L).

Edie Wilgten (R) 737-2007

Hoaaina St. 4 bdrm, 3 1/2 bath home with ocean views from every room. Indoor/outdoor lifestyle focuses around free form pool. Separate master suite. Fee pending. (33203) \$540,000 (L).

Vivian Fagan (R) 373-2351

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

SCULLY ROGERS LTD.

KOKO HEAD OCEAN VIEW

ACREAGE NOW FOR SALE. BEHIND KAISER HIGH SCHOOL ON THE SLOPES OF KOKO HEAD IS THIS RARE OFFERING 4.6 ACRES OF AG LAND. PRESENTLY IN TRUCK GARDEN WITH CARETAKERS HOME. RICH LOAM SOIL BUT POSSIBLY AN ANSWER TO YOUR OWN PRIVATE ESTATE. TERMS POSSIBLE AND OWNER WILL CONSIDER SELLING HALF. LS. **\$895,000**

MALAEKANANA FEE SIMPLE OCEANFRONT

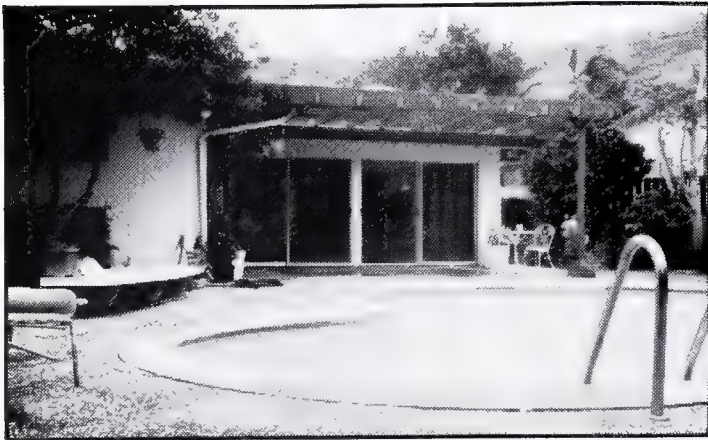
OVER AN ACRE ON ONE OF HAWAII'S BEST BEACHES. A PERFECT HALF MOON BAY WITH HOMESITES. SECLUDED, QUIET AND SOUL ENRICHING. YOUNG DOCTOR OWNER LOOKING FOR HALF INTEREST PARTNER TO DEVELOP PROPERTY. OAHU'S BEST WEEKENDER RETREAT.

\$220,000

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 713, Honolulu, Hawaii 96815

REAL ESTATE OPPORTUNITIES



HAWAII KAI TRIANGLE

Hawaiian living with this serene and private POOL area and yard. Enclosed lanai just perfect for parties. Four oversized bedrooms and living area with many built-ins. Fee available soon!

MLS 33717.....\$299,000 (L)

EILEEN SMALL INC. (R) 395-2240

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

MAKAHA VALLEY TOWERS Ocean & Mountain Views

Walking distance to famous Makaha Golf Course, tennis courts, beach & Resort Hotel

Apt. #710. 1 Bdrm Fee. Fully furnished. Excellent condition. Lister owner. \$65,000

Apt. #303 Fee furnished luxury 2 bdrm. \$110,000

Carol Matheny (R) 737-0966

Maggie Parkes
and Associates, Realtors

Aina Haina Shopping Centre, Suite 126
820 W. Hind Drive, Honolulu, HI 96821 • (808) 373-9869

Conley Dew...of Course.



MAGNIFICENT ESTATE. Pacific Heights Road. Nearly 1-1/2 acres of Fee Simple land with charming, large, well-cared for home which was remodeled through the artistry of Ossipoff. Sweeping lawns, flowering shrubs and plants, and friendly, mature shade trees. Properties such as this are rapidly disappearing from Hawaii. This could be your final opportunity to own such a property.

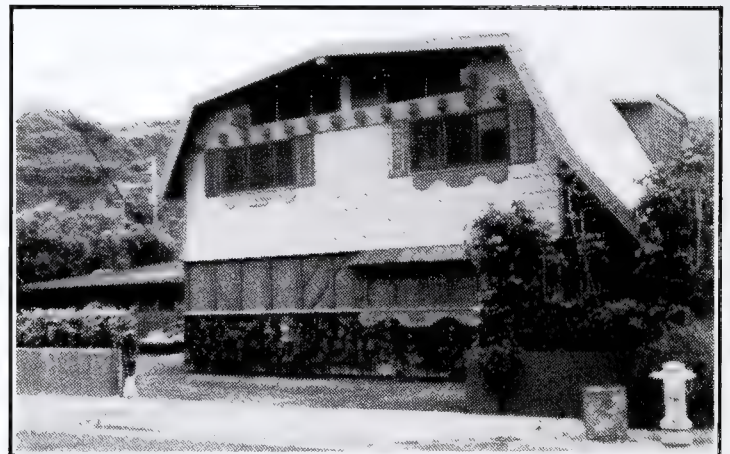
Call Barbara Dew (R) 595-3730

Waialae Nui and Waialae Iki are two of the most sought-after areas on Oahu. For available listings call Melanie Meinken (R) 732-5489 (Waialae Nui) and Mickey Patterson (R) 373-9633 (Waialae Iki).

CONLEY DEW

333 Queen St. • Suite 710 • Honolulu, HI 96813
A Real Estate Corporation

(808) 524-2844



FIXER-UPPER-TUNITY

DUPLEX! OHANA in place! Ideal multi-family or income producer. Over 4,000 sq. ft. of living area. Six plus bedrooms and four plus baths. Try "Bed and Breakfast." All this and owner-financing tool! Remodel or just TLC. (LH) \$310,000.

Call: Jerry Inforzato (RA) 923-8822

Century 21
KAHALA HALE, INC.

4400 Kalanianaʻole Hwy., Ste. C-21
Honolulu, Hawaii 96821

Office: (808) 735-7888 FAX (808) 735-2724

Discussion

In order to diagnose sporotrichosis, one has to have a high index of suspicion. This patient was initially treated for staphylococcus infection, but because the primary skin lesion became enlarged with raised edges and lymphangitic nodules were noted, the proper diagnosis was suspected and a biopsy and a culture for specific fungus was done. The lesion of sporotrichosis in some patients can mimic pyoderma gangrenosum and a case was mistreated, as was reported by Spiers et al.² Skin biopsy and tissue culture will determine the diagnosis. The differential diagnosis also includes squamous cell carcinoma of the skin and tuberculous lesions.



Figure 3: Completely healed lesion and nodules seven weeks after treatment.

Treatment

The patient in this report was treated with incremental doses of saturated solution of potassium iodide. The medication was started one week prior to receipt of the culture report. The response was one of remarkable improvement within one month and a complete cure at seven weeks.

The classic treatment for lymphocutaneous sporotrichosis has been a saturated solution of potassium iodide (1 gram per cc) taken by mouth in a dose of 3 to 4 grams three times a day until complete cure, plus two weeks. This therapy is almost always effective. However, it is often accompanied by adverse reactions such as gastric discomfort; softening of stool and abdominal pain was observed in some cases. When potassium iodide cannot be taken or when the disease process is more extensive than just lymphocutaneous involvement, intravenous Amphotericin B has been the anti-microbial of choice. More recently Ketoconazole has been used in the treatment of a variety of systemic mycoses because it can be taken orally and is relatively free of adverse reactions.³

The aloe plant was probably the source of sporotrichosis in this patient. Aloe is commonly used by local residents for minor burns and wounds of various causes. The author believes that there are more non-reported cases of sporotrichosis in Hawaii than one might think. Sporotrichosis should be considered in cases of delayed wound healing and ulcerative papulo-erythematous nodules that are not responding to conventional therapy.

REFERENCES

1. Fukushima R: Epidemiology and Ecology of Sporotrichosis in Japan. *Zentbl Bakt Hyg: A* 257:228-233, 1984.
2. Spiers EM, Hendrick SJ, Jorizzo JL, Solomon AR: Sporotrichosis masquerading as pyoderma gangrenosum. *Archives of Dermatology*. 1986; 122(6): 691-4.
3. Dismukes et al: Treatment of systemic mycoses with Ketoconazole: emphasis on toxicity and clinical response in 52 patients. *Ann Intern Med*: 98:13-20, 1983.

My Mana'o

At the first meeting of the year of the HMA's Medical Malpractice Law Committee, chaired by Ken Hughes, on Jan. 13, an interesting problem-solving modality was presented by a team from Kuakini Medical Center. It is called "Quality Circle."

The team consisted of three "facilitators": Aileen Sakado, RN, MS; Cheryl Lynch, RN; and David Reese, MBA, who is a director of production engineering.

Quality Circle (QC) has been in effect at KMC for four years. HMA committee member Frank Tabrah related, during the discussion after the three-part presentation, that the UH School of Medicine had a similar thing going, and that Straub had tried it and given it up.

QC is defined as "a small group of people doing similar work" — as in a hospital department — "who volunteer to meet together at regular intervals" to identify, analyze and solve problems of work quality, efficiency, etc., within their own immediate workplace.

Overtly, this sounds like any old committee's function. There is a difference, however. The "volunteers" sit in a circle. Each member is specifically asked for input — to bring up a problem or a bother he or she has noticed as continuing, to suggest a solution, or offer an alternative, or give a point of view on a problem that might have been assigned to the QC by adminis-

tration/management. The interestingly unique approach in QC is that (a) each and everyone present almost *have* to voice an opinion, and (b) that a consensus be reached, rather than have a decision by voting.

There is also included in the process the expected referral of the QC decision to a higher authority, but feedback from that authority is also expected. The issue is not just vetoed, dropped or lost in time.

While attending and listening at this HMA committee meeting, there was no way we could avoid turning one's thoughts inward and wondering how QC might apply to committee work within the HMA in general.

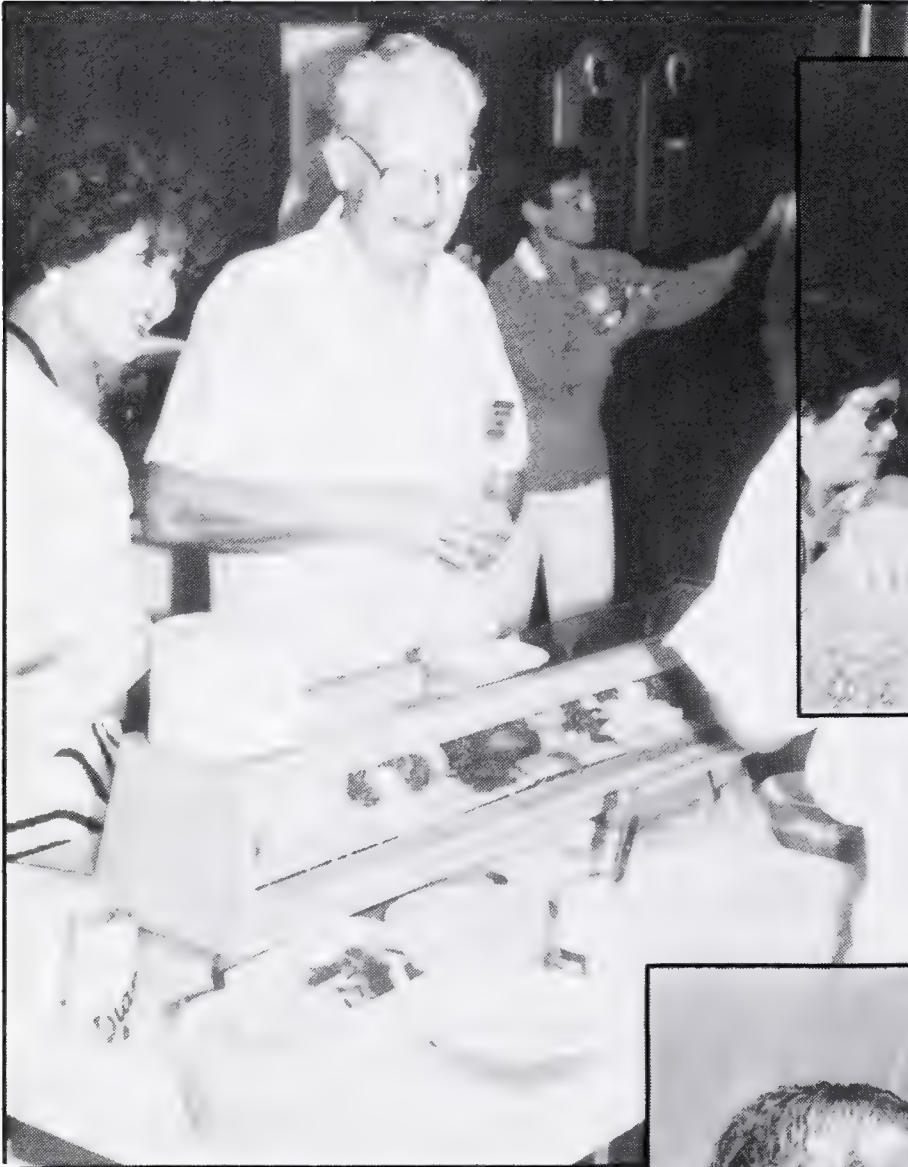
Too often have we noticed that in committees both large and small, both major and minor, in the HMA Council and even in its House of Delegates, there are members present only in name and not in substance. Ours, too, is a "circle" of volunteers, but all too often the circle contains silent, non-contributing "bumps on a log."

The HMA perhaps should insist on — nay, that's too strong a verb — encourage its committee chairmen to require an opinion to be expressed on each topic or problem, by each member present.

As for a consensus? 'asswhyhard, brah!

J.I. Frederick Reppun, MD, Editor

Meeting and Greeting Our



ABOVE: HMJ Editor Fred Reppun, MD (right) and Mrs. Allen Kunimoto (left) wait with great expectations at Kats' ever-popular sushi bar.



ABOVE: With legislative battles yet to begin, physicians spent a relaxed evening simply "talking story" with Senate and House representatives. Smiling for the camera are (left to right) Former legislator Connie Chun (wife of H.H. Chun, MD); Mazie Hirono, chairwoman of the House Consumer Protection Committee; and Walter Chang, MD, HMA president.



RIGHT: HMA lobbyist Charlie Ushijima (right) greets freshman Rep. Ken Hiraki (center) at the Pupu Party.

State Decision-Makers

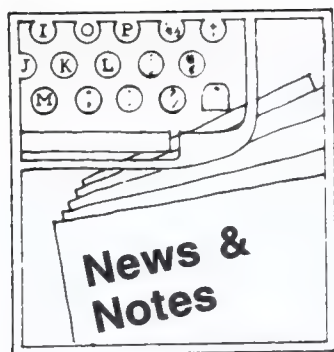
Although this year's legislative session is almost over, we thought you'd like a look at just one of the many HMA events that helped ensure that the voice of medicine was clearly heard by our state decision-makers. Early in February, HMA sponsored a physician-legislator cocktail party at the HMA headquarters. Physicians, bringing homemade pupus, acted as hosts, and House and Senate representatives arrived by the carload. Fun, food, and friendship were the "buzz" words of the evening . . . and the party provided valuable opportunities for establishing contacts that have proved important during the past few months.



ABOVE: Just the start . . . platter after platter of pupus arrived at the reception . . . by the end of the evening, table space was a very rare commodity!



LEFT: Physicians armed with everything from chicken wings to sashimi arrived with warm smiles and hearty appetites. Pictured are H.H. Chun, MD, (left) and Becky Kendro, HMA staff.



HENRY YOKOYAMA, MD

Life in These Parts

A door creaked open and a cheery voice sounded, "Is this *Amnesia Associates*?" Someone had come to settle his bill with Anesthesia Associates down the hall . . .

"Still hitting the ball far?" we asked Jack Morris, the golfer, as we reached for coffee and doughnuts at the Friday morning Mabel Smythe conference . . . Between munches and gulps, Jack related his tale of woe of how he felt his left shoulder rip as he drove against near-gale winds on the Molokai Sheraton's 16th hole in November last year . . . He managed to finish the 18 holes, and next day shot a remarkable gross 79 despite agonizing pain . . . Eugene Lance had to go in and repair the rotator cuff tear . . . Jack, the patient, continued with his next surgery, a bilateral inguinal herniorrhaphy . . .

He swore he would never ever consent to another same-day surgery . . . "Oral analgesics just don't work . . . I got up to go to the bathroom in cold sweat and when I got back, someone else was already occupying my bed! . . ." Jack choked on his doughnut . . . He grimaced and moisture beaded his forehead as he recalled the pain, the agony and frustration . . . "Never again . . .," he muttered . . .

Following the example set by Tripler on Oct. 7, Straub Clinic imposed a smoking ban as of Jan. 1 . . .

William Kepler who served eight years on the Maui County child abuse team says children rarely lie about sex abuse. Bill was testifying at a Second Circuit Court trial of a 51-year-old male school teacher charged with fondling seven girls ages 11 through 13 . . .

ESWL (extra corporeal shock wave lithotripsy) arrived in December and is housed in the new Hawaii Kidney Stone Center of the Pacific at QMC. Bill Yarbrough, medical director, expressed relief after lobbying two years for the \$2 million machine . . .

Richard Kekuni Blaisdell describes Malcolm Naea Chun's "Hawaiian Medicine Book" as a major event in Hawaiian scholarship and Hawaiian culture. The book contains some of the earliest written material on Hawaiian medical concepts and practices . . .

John McCurdy Jr. of Maui and Bruce Crisman of Honolulu were co-directors of a November liposuction workshop at the Hyatt Regency in Kaanapali . . . The faculty also included Pierre Fournier of Paris and Georgio Fischer of Rome, pioneer of the technique . . .

Back in December, some 40 people had applied for the state health director's position . . . The special review panel appointed by Gov. Waihee included the following physicians: Richard K.C. Lee (former health director), Jerrold Michael (dean of the school of public health) and Noboru Oishi . . .

The Hawaii seat belt law, 1 year old, has not resulted in a reduction of accidents or insurance premiums, but has caused a decline in serious injuries . . .

Kim Marie Thorburn, 36, surfer, internist with experience in prisons — San Francisco County Jail, San Quentin, the California Rehab Center, and the California Institute for Men — was attracted to Hawaii by the good surfing and the \$70,000 medical director's job . . . She will also be on the faculty of the John Burns Medical School . . .

SHEP (Systolic Hypertension in the Elderly Program)-Hawaii is one of 17 centers nationwide studying drug therapy of systolic hypertension to determine whether or not treatment will prevent strokes in elderly over 60 . . . Volunteers should have systolic pressures over 140 and diastolic pressures below 90 and have a negative history of MI (past two years) major heart problems, diabetes or renal failure . . .

Capable, popular Benjamin Young, former assistant dean of the UH Medical School for 12 years became vice president of UH student affairs . . . Ben resigned after one year as VP to go into private practice when he discovered he became too busy to practice any medicine.

The general tort reform measure passed last year has not helped lower medical malpractice premiums . . . Rep. Barbara Marumoto is pushing a Republican bill in the House to limit attorney contingency fees, abolish the joint and several liability concept, cap non-economic damage awards to \$350,000 and other changes . . .

Crusading pediatrician Wayne McKinny (who was inspired to become a doctor by Tom Dooley III and who during the late '60s and early '70s was in charge of seven orphanages in Saigon) is beginning an informal campaign to help Catholic nuns in Vietnam who once saved thousands of babies through their orphanage programs . . . The nuns who ran Cho Nhi Vien Viet Hoe orphanage in Cholon, the Chinese sector of old Saigon are no longer allowed by the Communist government to continue their ministries and are without adequate food or medicine . . . Wayne's number

is 377-5485 . . .

Consumer prices in Honolulu rose 2.3% for 1986, the lowest increase since 1978, but the medical care prices rose 6.7% according to the San Francisco regional office of the Federal Bureau of Labor Statistics . . .

Straub has EPS (electrophysiologic study) technology set up a year ago by cardiologist Edward Shen. Roger White, director of the Heart Institute of Hawaii explains that "EPS lends predictability to arrhythmias where previously we relied on guesswork. By turning problems into a predictability, you can have a plan of action . . ."

Elected, Honored & Appointed

Abortion pioneers George Goto, Vincent Yano and Joan Hayes were honored at a Jan. 22 luncheon sponsored by Hawaii Planned Parenthood, marking the 14th anniversary of the U.S. Supreme Court decision that legalized abortion . . .

Stanley Shimoda was one of 150 U.S. and Canadian physicians invited in January to participate in a symposium on "Upper GI: Mucosal Injury and Repair" in Fort Lauderdale, Fla. . . .

Kauai psychiatrist Daryl Matthews was certified a forensic psychiatrist by the American Board of Forensic Psychiatry Inc. There are fewer than 200 forensic psychiatrists nationwide . . .

St. Francis Hospital elected orthoped Edmund C.K. Lum chief of staff to succeed Clifford B.G. Chang . . .

David Lee Pang, chief of family practice at KMC, was one of nine physicians in U.S. selected to be part of the Stuart Cardiovascular Challenge Program . . . David donated the Stuart heart catheterization simulator to KMC . . .

KWCMC's King-Sau Siu was elected fellow of the American Academy of Pediatrics . . .

Physicians Retired

E. Morris Hayes, born of missionary parents in Shanghai, still spends three days a week at the Kula Clinic as a respite from managing stubborn Kikuya grass in his yard — thus carrying on his mission of healing instilled in him as a child . . .

(Continued on page 133)

COMMITTED TO EXCELLENCE



ROCHE
**PRESIDENT'S
ACHIEVEMENT
AWARD**

**Presenting
the winners of the 1987
Roche President's Achievement Awards**

Hoffmann-La Roche is pleased to honor these outstanding sales representatives, chosen for their unparalleled dedication to the health-care field, professionalism and consistent high level of performance. Please join us in congratulating these exceptional individuals.



Gordon B. Somekawa



Turn to the following page and find out how your award-winning Roche representative can help both you *and* your patients.

YOUR ROCHE REPRESENTATIVE WOULD LIKE YOU TO HAVE SOMETHING THAT WILL ...

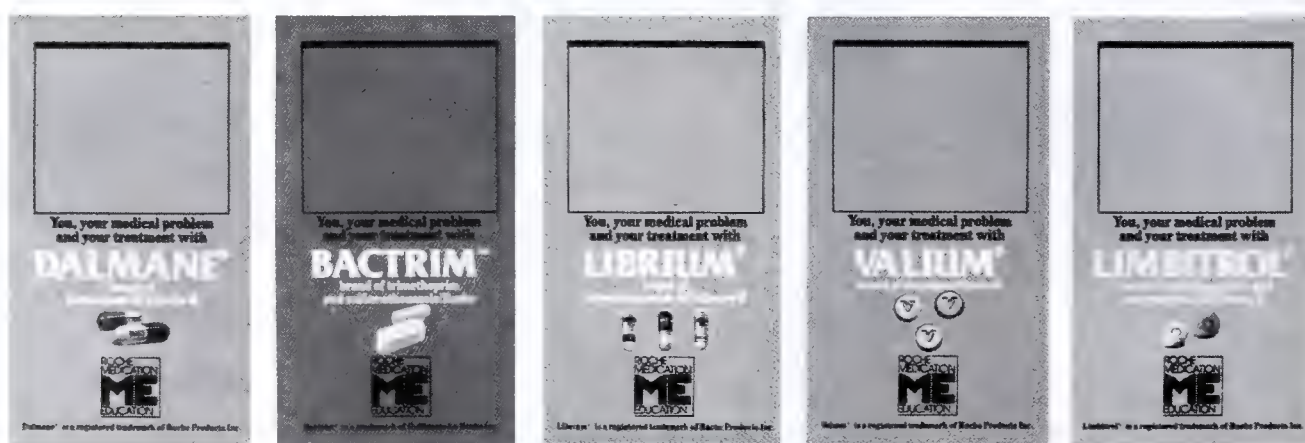


- ... improve patient satisfaction with office visits
- ... improve patient compliance with your instructions
- ... reduce follow-up calls to clarify instructions

The new Roche product books

- Offer a supplement to, not a substitute for, patient contact
- Support your specific instructions to the patient
- Provide a long-term reinforcement of your oral counseling

Because you are the primary source of medical information for your patients, we invite you to look over the Roche Product Booklets shown below and ask your Roche representative for a complimentary supply of those applicable to your practice.



Medicines that matter from people who care

Personalities

Vic Hay-Roe's fondest ambition was to be a commercial artist or Disney cartoonist . . . but he ended up a plastic surgeon . . . Ten years ago Vic bought a kit for Christmas tree ornaments depicting Snow White and the Seven Dwarfs and it has been Christmas all year 'round since . . . Vic and wife Lynn have been making Christmas tree ornaments ever since — over 600 characters from children's stories and Disney denizens . . .

Sportsmen

Marathon muse Jack Scaff on how to prevent overheating when running: "Once you get dry, swallow a drink . . . Get used to drinking fluids, lots of them . . . A rule of thumb is to drink 10 ounces of water for every 20 minutes you run, and to urinate four hours after you finish . . . The urine should be colorless once a day . . . You lose a pound of water for every three miles you run . . . The time to drink is before you need water, so tank up early . . . Blood is shunted from the stomach to exercising muscles . . . Drink at the beginning of a race; drink at the end of a race; and drink along the way . . .

Lichterisms

Pearls on low back pain by Rowlin Lichter . . . Willows: Nov. 18, 1986:
Over eight weeks' duration — serious . . .
Not everything is a disc . . .
Rapid deterioration — urgent . . .
Cauda Equina Syndrome — an emergency!
Diffuse problems need neurologist or psych help . . .
Always ask about sexual dysfunction — no shame!
Progressive dysfunction — urgent; Alternating — psych . . .
No change — need psych help . . .
Don't try to go it alone . . .
Don't argue — reassure . . .
Send the passive-aggressive to someone with time and experience . . .
Reassure and communicate with the Fearful . . .
Not all addicts are depressed, but many are . . . Speak openly . . .
The Support System may need help . . . counselor, priest, social worker, etc. . . .
Explain use of needs carefully and repeatedly . . .
Shoppers are probably seeking what you don't have . . .
Use ice, position, Feldene, placebo, etc., but never *Percodan* . . .
Re: Narcotics: Doctors may promote addiction . . . Stick to NSAID's and ice . . . No reason for Percodan . . . Don't use muscle relaxants . . . There are no muscle relaxants — only sedatives . . .
Don't use heat — ice works — ice gives diagnosis . . .
Recurrent LBA in past year due to: (1) Incomplete treatment — rehabilitate . . . (2)

Chronic pain syndrome — get NP help . . . (3) Torsion injury (needs rehab or surgery).

Diabetes, knee injuries, i.e., debilitated illness . . . Punt to specialist . . .

Exercise — the primary screen for conservative care . . .

Depression comes in many forms — These people need help to get well . . .

If the patient doesn't like you — find him another MD . . .

Keep the insurer informed — they pay the bills . . .

Don't tell fat people to lose weight or leopards to remove their spots . . .

Beware the patient who delays RTW . . . With or without "recurrence" . . . Often insurer or attorney may help . . .

Push patient — establish a routine and a plan with goals . . .

Overcome your natural fear of attorneys . . .

Minimal findings and much fear . . . Watch for mimicry . . .

Random Notes on Living Will Legislation

(From lecture by doctor-lawyer William Goebert at Nov. 7 QMC Conference.)

"Buzz words: competent . . . incompetent . . . terminal . . . relatively short time . . . comfort and pain relief . . . life-sustaining . . . extraordinary means . . . next of kin . . . personal belief . . ."

Competent: "Based on California experience, only 15% of patients will have a living will . . . The remaining 85% will be dying under common law . . . All states believe the patient has ability to control his own body and therefore his own life . . . "Law and society feel that the body belongs to the person . . ." Every state considers suicide — a crime and assisting a suicide a crime . . . The court will uphold the person's belief, e.g. Jehovah's Witness . . . California Law says when a patient is competent, he can discontinue treatment . . . But when the patient's decision affects some other person, e.g., when a mother refused C-section, the Court stepped in to prevent the death of her viable fetus."

Incompetent: "The Court steps in according to: (1) What that person wanted when he was competent . . . (2) What next of kin want . . . (3) What doctor wants . . ."

Terminal: "No one knows what terminal is . . . Life is terminal . . . **Incurable?** What does it mean?"

Relatively Short Time: "No definition."

Comfort and Pain Relief: "Living will legislation cannot remove IV and NG feedings . . . If patient is unconscious, is tube feeding giving comfort?"

Life-Sustaining; Extraordinary Means: "Is fluid and nourishment extraordinary means? Hawaii has no ruling . . ."

Next of kin: "The line of succession is important in who decides treatment on an incompetent patient . . . If brothers disagree, then Court appoints a guardian for property and a guardian for person . . ."

Personal Belief: (or conscience) "No one understands what this means in the living will section . . ."

Physician Duty re: Living Will: (1) Part of record, (2) Patient gives to physician, (3) Don't witness, (4) Two physicians certify terminal event (in writing), (5) Revoke if patient or two witnesses say otherwise (Patient allowed to change his mind if competent), (6) Deliver to hospital when needed.

National News

In mid-November, Medicare had announced plans for a 28-day delay in payment for reimbursements, but cries of protest from the nation's 32 million Medicare patients halted the plan. Instead, the reimbursements will be made on the average of 20 days after submission, so announced Health & Human Services secretary Otis Bowen . . .

Conference Humor

Three surgeons were discussing patient characteristics and the relative ease they can be operated on . . . Surgeon A: Certainly, the German patients are the easiest . . . They are so organized and disciplined that all organs and parts are in place . . . Surgeon B: No, I think the Japanese patients are easier. They are equally organized and disciplined and they have microchips in their organs, which make them easier to locate . . . Surgeon C: You are all wrong . . . The attorneys are the easiest to operate on . . . They have no hearts, and no guts . . . Besides their mouths and anuses are interchangeable . . . (As told by S.Y. Tan, doctor-lawyer who heard the joke from fellow law students . . .)

Miscellany

A male jogger found a tennis ball outside the Kapiolani courts and slipped it into his front pocket . . . Later as he rested on a park bench, along came an attractive young woman jogger who noticed the obvious bulge and asked about it . . . "Oh, it's a tennis ball," he replied . . . "Oh dear! Does it hurt like a tennis elbow?" she asked sympathetically . . . (From the repertoire of John Howett, Dista Rep.)

☆☆☆

A doctor and his wife were walking down Kalakaua Ave. one evening when a buxom blonde in a tight-fitting outfit passed by and smiled at him . . . "Who was that?" interrogated his wife . . . "Oh, just a young lady I know professionally" he said, reddening visibly . . . "I'm sure of that," acknowledged the wife . . . "But your profession or hers?" (Anonymous)

☆☆☆

"I'm through going to my psychiatrist," asserted the call girl . . . "I just can't get used to a guy telling me to lie on a couch and then sending me a bill." (Anonymous)

IRA ANNUITY ROLLOVER

1 YEAR COMPOUNDED

TAX-DEFERRED YIELD*

EARN

7.75%

WORTH

10.76%

ROLL OVER YOUR EXISTING IRA INTO THIS HIGH-YIELD ANNUITY.

- No sales fees
- \$2,500 minimum
- Tax-sheltered growth
- 10% of contract value may be withdrawn yearly. Withdrawals before age 59½ may be subject to 10% IRS penalty on taxable amount.

*Based on 28% marginal tax bracket. Bailout feature declined.

Call Norman Shigemura at 544-8558 for further details.
Rates and terms subject to change without notice.

This insurance program is underwritten by Equitable Variable Life Insurance Company, a subsidiary of Equitable Financial Services, the nation's third largest insurance company. These annuities are not FSLIC insured and not accounts or deposits at International Savings.



INTERNATIONAL SAVINGS

Banking for an International Hawaii.

13 convenient island locations to serve you:

OAHU:						MAUI:	HAWAII:
Main Office	Kahala	Kalihi	Kapahulu	University	Waipahu	Waimalu	
547-5110	544-8487	544-8476	544-8595	544-8470	677-3181	487-1587	
		Bishop	Kailua	Kaneohe	Kapiolani		
		544-8568	261-9731	235-5864	544-8482		

Shopping for a new telephone system? Haven't called Harris Lanier Hawaii?

YOU DON'T KNOW WHAT YOU'RE MISSING!

Advanced. Affordable. Backed by unparalleled Service and Support. *Business Telephone Systems Without the Usual Hangups from Harris Lanier Hawaii.* Offering a full line of the latest in office communications at prices you can afford. We customize every system according to your needs.

Call us today at **536-7752** for a no obligation evaluation.



HARRIS

LANIER

HAWAII



Conference Dialogue . . .

Infectious disease man Francis Liu had just lectured on malaria . . . Dennis Meyer related the following anecdote: "You mentioned tetracycline for malaria treatment . . . Well, back in 1972, we didn't know that . . . We would fly into the boon docks of Cambodia and treat three or 400 patients with Primaquine . . . Once we ran out of stock and the situation was desperate . . . We had to give out something . . . We had tetracycline left so we dished it out. When we next returned, the Falciform malaria patients were cured . . . It was pure serendipity . . ."

Someone admonished, "You know you weren't supposed to be in Cambodia."

Francis Liu quipped, "Now I know what we need if we're marooned on a deserted island . . . Instead of aspirin, Advil, or Tylenol, we should carry tetracycline as the drug of choice . . ."

Hors de Combat

SHPDA (State Health Planning and Development Agency), an offshoot of the federal Health Planning Act and bane of hospital and clinic administrators, regulates major equipment purchases, improvements, and new business applications at hospitals, nursing homes, and clinics by requiring a certificate of need be approved . . . Two state lawmakers, Rep. Fred Hemmings and Sen. Mary George are co-sponsoring legislation to eliminate the agency on grounds that it is too costly to operate, that it stifles competition and ties hospital administrators' hands with red tape . . . Supporting them are the Hawaii Federation of Physicians and Surgeons, Small Business of Hawaii, and the Hawaii Medical Association . . .

Elmer and Nathan Valin, 24-year-old twin Filipino brothers from Kalihi have sued the UH Medical School for discriminatory admissions procedures . . . Manny Valin, a Realtor, says his sons graduated with 3.66 grade point averages at UH . . . The suit contends that Filipinos are consistently underrepresented in the medical school . . . University Relations Administrator Chapman Lam says the racial breakdown of the medical school is approximately 33% Japanese, 30% Caucasian, 15% Chinese, 10% Hawaiian and part-Hawaiian, 4% Filipino and the rest "other" (Filipinos comprise 12% of the state's population) and that "the whole recent history of the medical school has been strongly in support of affirmative action, so this type of thing is rather surprising."

Conference Notes

Norman Kaplan, author of Clinical Hypertension (which is coming out with its fourth edition) lectured on "Mild Hypertension" in early December. Herein are notes gleaned from his lectures:

Incidence of mild hypertension (diastolic pressure 90-94 mmHg): 25.3% of U.S. population ages 30-69 . . . 43% to 56% of mild hypertensives are being treated . . .

**Any lender can help get your
home improvement project started.**



An AdvanceLineSM can help your home reach its full potential.

You know how home improvement projects go. First, the kitchen, then the bath, then a pool, then landscaping. And each time you find yourself trekking down to a bank for another home improvement loan. Not with an AdvanceLine from First Interstate Bank.

One trip and your AdvanceLine will see you through project after project. Year after year. AdvanceLine is a revolving personal line of credit, much like a super charge card. As you repay, you actually rebuild available credit for future use.

An AdvanceLine can be established right up to \$250,000, depending on how much equity you have and, of course, your ability to repay.

The interest rate is based on the average 91-day Treasury Bill rate during the prior calendar quarter, so you're always paying a fair, current market rate.

But perhaps most important, since your AdvanceLine is secured by home equity, you qualify for full interest expense deductibility under the Tax Reform Act of 1986 and your AdvanceLine is not limited to just home improvement use.

You can use your AdvanceLine for tuition payments, taxes, major purchases, investments or even paying off other, more expensive loans and charges.

For more information about AdvanceLine, stop in at any branch or call the Consumer Loan Center at 525-8290. Let us help you get the full potential out of your home.



An equal housing, equal opportunity lender. Member FDIC.



CLASSIFIED NOTICES

FOR SALE

50% OFF PREVIOUSLY OWNED medical, laboratory, office, x-ray, ultrasound equipment. We buy, sell, broker, repair. Medical Equipment Resale, Inc. 24026 Haggerty Rd., Farmington Hills, MI 48018; 1-800-247-5826, (313) 477-6880.

SERVICES

BOOKKEEPING & BILLINGS

For medical professionals.
Prefer part-time. Refs. available.
Call 949-2015 or 526-1818.

EMPLOYMENT OPPORTUNITIES

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible Obstetrician-Gynecologist needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:

D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793

(An Equal Opportunity Employer)

ISLAND FEVER?

Respected Internist desires to switch practices for a short time. Good salary. Good living conditions. Glen Deutsch MD, 410 Division St., Buffalo, MN 55313. (612) 682-3325

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible General Internist needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:

D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793

(An Equal Opportunity Employer)

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible Pediatrician needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:

D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793

(An Equal Opportunity Employer)

OFFICES

Experience a piece of downtown Honolulu at reasonable rates, free-rent pkgs., tenant improvements and parking. Call today for your ideal office space. 521-0321 HAWAII MANAGEMENT CORP.

- Finished office space Kaneohe 900 to 1500 sq. ft.
- X-RAY OFFICE also available. Gerell + Assoc. 524-5417

Has parking been a problem for you and your clients? Call us today! We have the office space for you with ample free parking. Bobbie Martinsen (R) 521-0321 HAWAII MANAGEMENT CORP.

The conclusions from the studies (i.e., the six major studies and three smaller studies): (a) We have to be cautious about treating everyone . . . e.g. quality of life . . . must be considered . . . (b) We have to reconsider the mode of therapy . . .

"Doctors make the BP go up . . . Self monitoring at home show lower BPs than in a doctor's office . . . Doctors are the worst thing to happen to patients . . . We have to be careful about labeling patients as hypertensive because of psychological and socio-economic problems . . . Mae West, our most famous Western philosopher said, 'Too much of a good thing is wonderful' but considering the

risks and benefits of treating mild hypertension, 'Too much of a good thing may *not* be wonderful.' "

Hypertension is the most common reason for visits to a doctor . . . Hypertension is also the most common single indication for use of drugs . . .

The issue is whether or not treating mild hypertension will lower the risks . . . Strokes are reduced 38% by treatment, but fatal coronary heart disease, the most common major complication of hypertension, is reduced only 8% . . . The fatality and morbidity from coronary disease is frequently less in those *not* treated . . .

leas·able

(le-sa-b'l), *adj.*

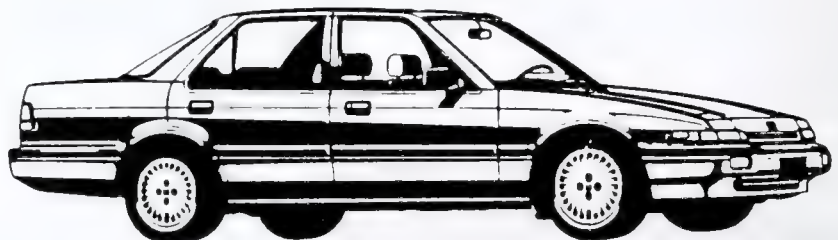
1. ability to drive more car for less money
2. opportunity to save or invest your down payment instead of putting it into a car
3. ability to benefit from the new tax laws
4. an affordable way to finance a new Honda 4 dr Accord for only

\$168.00

PER MONTH PLUS TAX

Model CA552: 1st payment, license, security deposit and process fee delivers your car

60 month closed end lease. Total of payments \$10,080 + tax

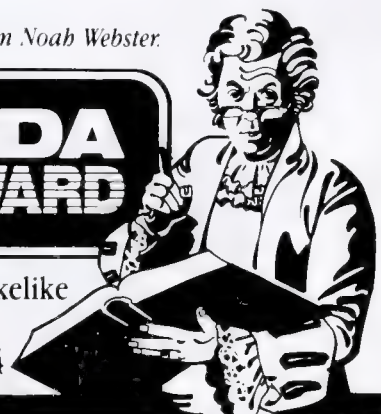


Choose from stock or order one of your choice for the same Monthly Payment.

A Word to the wise from Noah Webster.



in Kaneohe near Likelike
and Kam Highways
Telephone 247-8544



Over the Editor's Desk

STEPHEN R.P.K. BRADY, MD

VIDEO UPDATE ON ALZHEIMER'S DISEASE EXPLORES FUNCTIONAL ASSESSMENT STAGING—SECAUCUS, N.J.—How Alzheimer's disease progresses and what physicians can do to ease its impact on patients and their families are the topics of "Alzheimer's Disease: A Clinical Update," a new videocassette with Barry Reisberg, MD, associate professor of psychiatry at New York University School of Medicine, and clinical director of NYU Medical Center's Aging and Dementia Research Program.

Focusing on a diagnostic tool developed in the research program — Functional Assessment Staging (FAST) — Reisberg demonstrates its use in the diagnosis, tracking, and management of dementia. The video has been available in more than 700 hospitals and medical centers nationwide through the Network for Continuing Medical Education (NCME) since last December.

The functional stages described in Alzheimer's occur in a recognizable pattern. With the staging tool FAST, physicians can now predict the entire course of the illness in great detail. This enables the doctor to determine how long a patient is likely to be at a given stage and when latter stages are likely to occur.

In his current update, Reisberg revisits several of the same patients evaluated in a 1983 NCME video program on Alzheimer's. By comparing their present status with what has been preserved on videotape from three years ago, Reisberg demonstrates both the progression of the disease and the utility of FAST staging in developing strategies for management.

Co-sponsored by the Albert Einstein College of Medicine of Yeshiva University, the telecourse carries two credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association and is acceptable for two prescribed hours by the American Academy of Family Physicians. For more information, contact Jim Disque at (201) 867-7600.

MEMO

TO: ALL DOCTORS
FROM: PEQEX

Do you need assistance in obtaining a specialty medical product?

Would you be interested in saving on quality medical and surgical products?

Are you planning to set up a medical office or clinic?

Let **PEQEX, Inc.** be your answer, Call 537-2724

Representing:

BEAVER • BURTON • DETECTO • PYMAH
CARING • DAVIS & GECK • MILTEX • PEDIGO
JOERNS • GRAHAM FIELD & MANY OTHER COMPANIES

PHYSICIANS EQUIPMENT EXCHANGE, INC.
PEQEX, INC.

(808) 537-2724

831 Pohukaina St., #C-3 Honolulu, Hawaii 96813

*Did
you
know?*

Did you know that Saint Francis Medical Center is now a surgical leader?

The only one doing organ transplants, both kidney and bone marrow, and a leader in laser surgery.



**Saint Francis
Medical Center**

Discover the Difference





O.P.T.I.O.N. Care® of Hawaii

A Home IV. and Nutritional Service

WE'RE THE LEADER IN INTRAVENOUS HOME CARE.

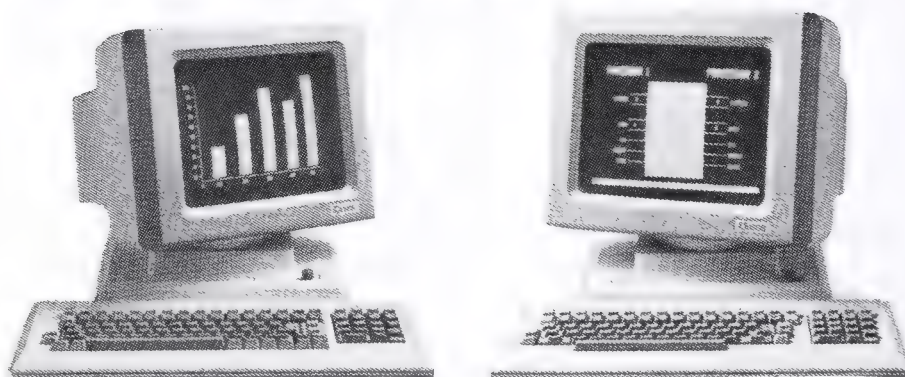
WITH 96 OFFICES, NATIONWIDE, IT'S NOT OUR FIRST TIME OUT. SPECIALLY TRAINED CLINICAL PHARMACISTS, EXPERIENCED RN I.V. THERAPISTS, SERVICE AND CLINICAL DATA FROM ONE SOURCE, TIMELY AND ACCURATE REPORTING, AND 24 HR. AVAILABILITY SETS US APART FROM THE CROWD!

WE HAVE THE SOLUTION FOR YOU®

For More Information **CALL 254-5841**

Pali Palms Plaza 970 N. Kalaheo Ave. Suite C-106 Kailua, Hawaii 96734

Medical Offices Have a Choice! GET THE BEST



TRUE Multi-User
Medical Computer Systems

Established Hawaii Client Base



MICRODYNE

THE
FULL SERVICE
COMPUTER
COMPANY

524-1740

677 Ala Moana Blvd. Suite 411

ONLINE MEDICAL INFORMATION SERVICE OFFERS FREE TELECOMMUNICATIONS SOFTWARE TO ITS SUBSCRIBERS—Colleague, the computer-based medical literature and information retrieval service for health care professionals, is offering a full-featured telecommunications software package free of charge to its subscribers.

A joint venture between medical publisher W.B. Saunders and information technology leader BRS, Colleague offers user-friendly access to the world's literature as well as special "online only" sources of information. Colleague also provides subscribers with electronic mail communication and a variety of medically oriented electronic bulletin boards.

The new program now being offered is named "Colleague Express," and automatically dials the local telecommunications carrier number and connects the user to the Colleague service. Once there, the program displays screen information from the top down, for easier, more convenient reading. Search terms are highlighted wherever they appear in the retrieved information, enabling quick evaluation of their context, and several screens of information are stored by the program allowing the user to scroll back and review the search session.

Colleague Express also activates and controls the computer printer for quick printouts and downloads information to the computer diskette for permanent storage. The program makes use of the computer's function keys to enter frequently used Colleague commands. Colleague Express runs on IBM-compatible computers using Hayes-compatible modems.

For more information about Colleague and Colleague Express, call toll-free 1-800-468-0908.

SURVEY REVEALS AMERICANS DON'T KNOW SEXUAL FACTS OF LIFE—A national survey conducted for a manufacturer of ovulation predictor tests shows that nine out of 10 Americans, even those who already have children, actually don't know the sexual facts of life. Among the facts adults were unclear about were how many days a month a woman is able to become pregnant, how long sperm live after sexual relations, and how to define "ovulation."

The ovulation predictor test enables couples to predict the time when intercourse will most likely result in pregnancy, aiding those who have trouble conceiving as well as those who could

benefit from more precise timing. The test, the only product of its kind available over the counter, uses state-of-the-art monoclonal antibody technology to determine when intercourse will most likely result in pregnancy.

DRUGSTORE CHAIN ENCOURAGES "PARENT POWER" IN FIGHT AGAINST TEENAGE DRUG ABUSE

—Illicit drug use among American youth has escalated to alarming proportions since the 1960s, with at least 61% of all American youngsters having used an illegal drug at least once before they finish high school and 40% having used drugs in addition to marijuana.

In an effort to expand its fight against teenage drug abuse, one of the country's largest drugstore chains has developed a new anti-drug abuse program designed to help parents talk with their preteen and teenage children about the dangers of drug experimentation and use.

A 12-page brochure, titled "Teach Your Children Well," and radio public service announcements emphasize the need for communication with children about illegal drugs and suggest ways to effectively reach the youngsters. The brochure also lists signs and symptoms of early drug use. Bulk copies of the

brochure and a poster are being offered free to more than 7,500 PTAs. Pharmacists from the company, with special slide presentations on the topic, are available to speak to parents at meetings in a 15-state area in the Southeast and South-Central United States.

Above two articles from Science & Industry.

COMMUNICABLE DISEASE REPORT—The following cases were of Hawaiian or Asian background. Seventy-one percent of the cases occurred in men, there was no increased risk of acquiring illness based on sex or ethnic background.

In examining cooking methods of wild boar sausage, four individuals who microwaved pork (100%) became ill. Microwaving sausage at high heat for two minutes was significantly associated with illness ($p < 0.01$, Fishers exact test). Illness was also significantly associated with undercooking the wild pork sausage ($p = 0.02$, Fishers exact test), as two of three remaining cases indicated their pork was undercooked before consumption.

This investigation underscores the

VACATION LOAN

Before you fly off, walk in and see us about a vacation loan. We'll be there.



Central Pacific Bank
The Art of Service
Phone—544-0500

THE MOST PRECIOUS
COMMODITY OF ALL

Time.
What you do with it
is your business.
Helping you make the most of it
is ours.

**Honolulu Cellular
Telephone Company**

Hawaii's world-class cellular system operator.
1161 Kapiolani Boulevard Honolulu, Hawaii 96814 Ph. 545-4765

ERICSSON

TAX-FREE INCOME

YOU WANT IT!



WE PROVIDE IT!

HAWAIIAN TAX-FREE TRUST

... provides you with a high level of tax-free income—free from *both* State of Hawaii and Federal income taxes.*

Plus a lot *more*...

- Strong Stability of Capital**
- Low Initial Investment of \$1,000
- Automatic Dividend Reinvestment
- Daily Liquidity
- Frequent Statements and Reports

The Trust is designed *especially* for Hawaii residents. It is the only locally managed mutual fund which invests in Hawaii tax-exempt municipal bonds—the kind of bonds which finance hospitals, roads, harbors and airports throughout our *State*.

This means you get the benefit of *double tax-free* income with many conveniences. And, through your investment, the Trust helps finance needed projects right here in Hawaii.

HAWAIIAN TAX-FREE TRUST... for *akamai* investors

FOR INFORMATION

Contact Your Local Investment Broker
OR CALL

1-800-228-4227

TOLL-FREE FROM HAWAII 7 DAYS A WEEK, 24 HOURS A DAY
Aquila Distributors, Inc., 200 Park Avenue, New York, NY 10017

You will be sent free descriptive material and a prospectus containing more complete information including management fees and expenses. Read carefully before you invest or send money.

INVESTMENT ADVISOR

Hawaiian Trust Company, Ltd.

A Trust and Investment Company of

Bancorp Hawaii

*Under certain market conditions some income may be subject to state and federal tax
**Share price will vary somewhat with interest rate market fluctuations.

Honolulu Orthopedic Supply

ORTHOTICS
PROSTHETICS
MASTECTOMY FITTINGS
ORTHOPEDIC SHOES
WHEELCHAIRS
WALKING AIDS

536-6661

1365 Nuuanu Avenue • Honolulu, Hawaii 96817

potential for acquiring trichinosis when one consumes an inadequately prepared product at risk for containing *Trichinella* larvae. Recommendations made included: (1) adequate freezing of wild game before distribution and consumption (holding pork in deep freeze for three weeks at minus 15 degrees C should prove effective), (2) thorough cooking of the meat product to destroy the *Trichinella* larvae — must be heated to at least 58.3 degrees C (137 degrees F), and (3) when microwaving pork products, **ALL PARTS** of pork muscle tissue must be heated. Information is lacking on the power setting and time necessary to achieve the necessary temperature by different microwave ovens. Because microwave ovens may not produce uniform temperatures throughout a product, such cooking may not kill trichinae in pork. Users of microwave ovens should take special care in cooking potentially *Trichinella*-infected meats until safe procedures are established.

From the Hawaii State Department of Health, Epidemiology Branch, P.O. Box 3378, Honolulu.

FREE AICR BOOKLET EXPLAINS HARMFUL EFFECTS OF FAT—A new booklet from the American Institute for Cancer Research (AICR), "All About Fat and Cancer Risk," removes the mystery from dietary fat and makes clear how important the fat in our diet is to the health risks we all face.

While we're usually aware of fat in fried foods or as visible fat on meats, many people do not realize that there are hidden fats in many of the foods we enjoy. Common foods such as avocados, most dairy products, chocolate, nuts, most cookies, the powdered dairy creamer we use in our coffee, and many other common food items all add a great deal of fat to the average diet.

According to the booklet the average American diet gets about 40% of its calories in the form of dietary fat. Because of the links that some research has shown between high fat diets and cancers of the breast, stomach and colon, the AICR recommends reducing fat to 30% or less of daily calories. This is similar to the recommendation of the American Heart Association, which cites links between high fat diets and heart disease.

For a free copy of "All About Fat and Cancer Risk" please send a stamped, addressed, business-sized envelope to American Institute for Cancer Research, Department FC, Washington, D.C. 20069.

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.

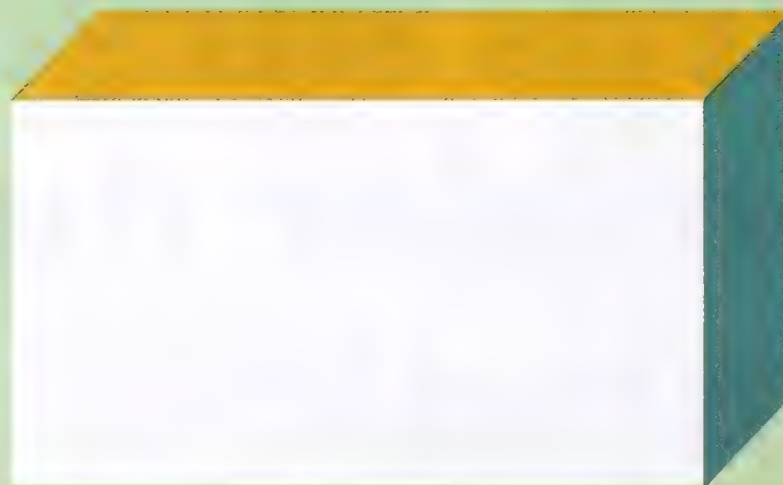


HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo)
	329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**

Finally, a credit line that can cost this much to open.*



And only this much to use.



Our FirstLine of CreditSM is secured against equity in real estate to give you an interest rate that's almost too good to be true.

There are no points to pay. Few, if any, closing costs.* And, (unlike a major competitor) no requirement that says you have to use a percentage of the line amount within a given time period to avoid closing costs.

You pay only when you use it and only on what you owe. And since it can cost nothing to open, it makes sense to have it just in case you need it.

Apply now while we're waiving up-front fees. And get the credit line that can cost nothing to open and little to use.



*Appraisals are waived for most fee simple, owner-occupied properties.
Most closing costs are also waived on FirstLines secured by either fee simple or leasehold properties.



MAY 1987
VOL. 46, NO. 5

Hawaii MEDICAL Journal

CURRENT
AREA

Hawaii medical journal
UCSF LIBRARY
Received on: 06-03-87

U OF CA-SAN FRANCISCO
THE LIBRARY
ACQUISITIONS DIVISION
SAN FRANCISCO, CA 94143

3



CONTENTS

EDITORIALS: 149

DRGs

J.I. Frederick Reppun, MD

Boxing as "Sport"

Russell T. Stodd, MD

LETTERS TO THE EDITOR Re: 151

ABC Show

on DRGs

R OF THE 152

F HEALTH

Lewin, MD

ASBESTOS REMOVAL FROM BUILDINGS: 153

A REVIEW

D.G. Massey, MD, FACP

G. Fournier-Massey, MD, PhD

RED BLOOD COUNT, HEMOGLOBIN AND 158

RED CELL INDICES IN HEALTHY ADULT

ORIENTALS IN HAWAII

Robert T.S. Jim, MD

CONTINUING MEDICAL EDUCATION 166

HAWAII ACADEMY OF FAMILY 168

PHYSICIANS NEWSLETTER

Marlies H. Farrell

COUNCIL CAPERS 168

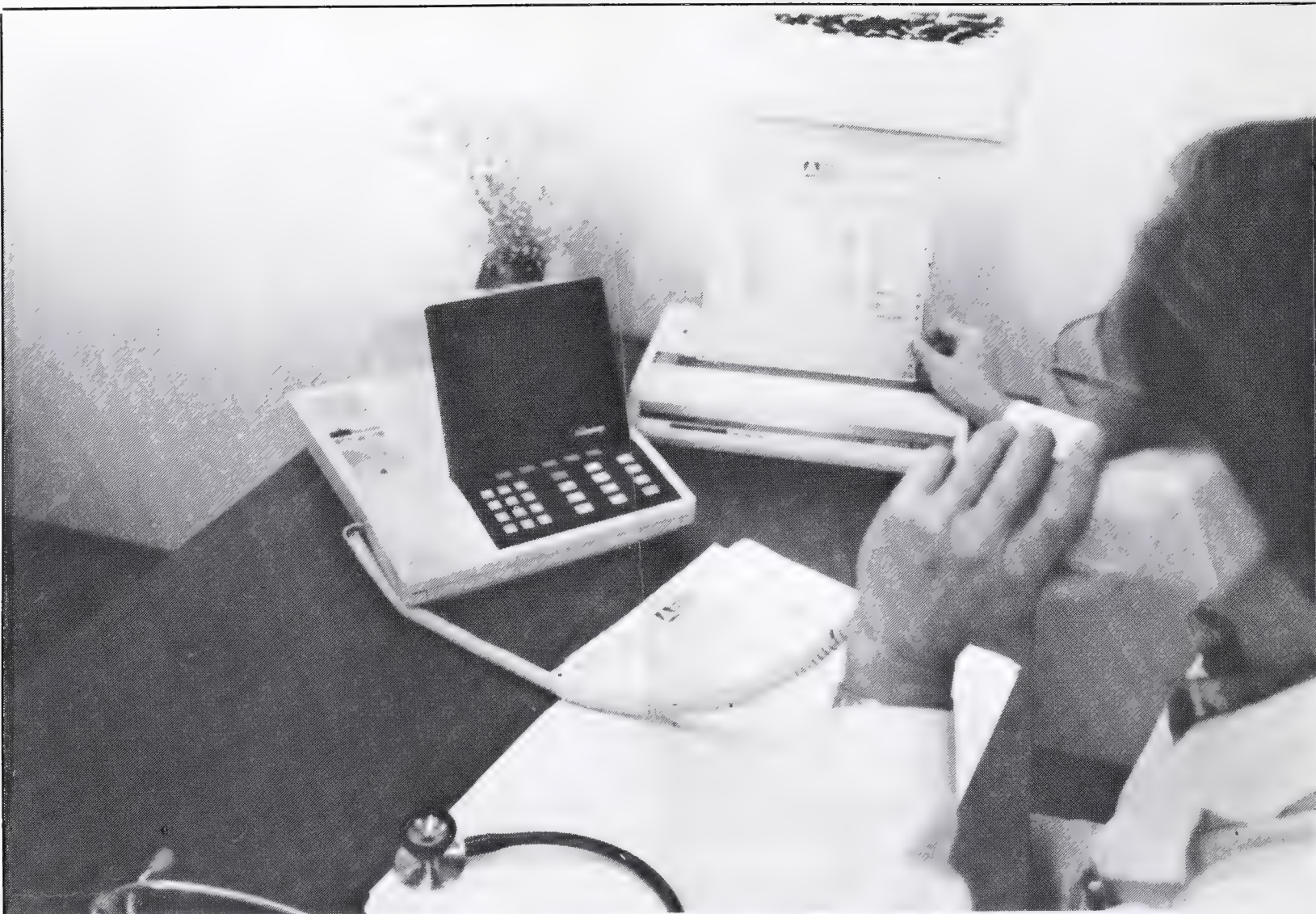
Denis J. Fu, MD

NEWS & NOTES 169

Henry Yokoyama, MD

OVER THE EDITOR'S DESK 173

Stephen R.P.K. Brady, MD



As Hawaii's own independent clinical laboratory,

Diagnostic Laboratory Services serves you and your patients with advanced computerized technologies for maximum reliability and efficiency. **DLS** provides a broad scope of high quality lab services at a reasonable cost. **DLS** offers physicians and hospitals the latest information systems to enhance their practices and benefit their patients.

Creative physicians today use innovative supporting services to the advantage of their patients and practices. With our skilled staff, state-of-the-art instrumentation, and centralized computer system, we can assist you in providing your patients better medical care.

Networking

DLS offers physicians and hospitals the opportunity to utilize LABNET, a new dimension in laboratory services: an on line computerized information system allowing you immediate access, 24 hours a day, to comprehensive clinical information while simultaneously protecting its security and confidentiality.

Centralized Computer System

DLS is computerized from the moment patient information and specimens are registered to the final delivery of results to your office by courier or LABNET. For the extra protection of your patients, our computer highlights all significant abnormal test results, alerting our Client Service Department to call your office.

Additional Services

- Automated Hematology
- Multi Channel Chemistry Analyzer
- Broad Range of In-House Esoteric Testing
- Disease Oriented Profiles
- Flexible Billing
- HMSA Assignment Accepted

Put us to the test.

 **Diagnostic
Laboratory
Services INC.**

523-7061



**The best doctors get sued.
We protect you.
We know how.**

Let us tell you how we do it.



Medical Insurance Exchange of California

Professional Liability Exclusively

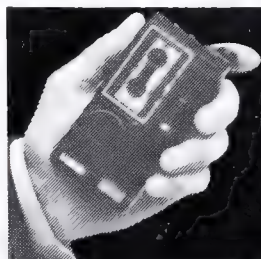
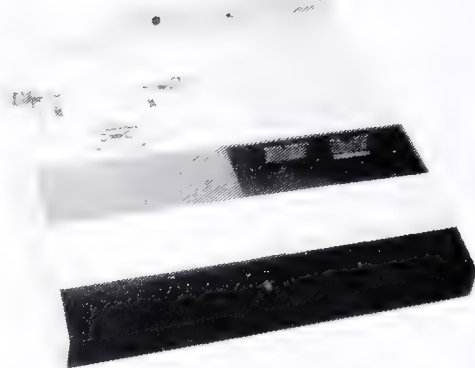
6250 Claremont Avenue, Oakland, California 94618-1324

Call MIEC's Honolulu Claims Office, 545-7231, or call toll-free 800-227-4527

The MESSENGER

Management's ticket
to productivity.

- The voice processor that enables simultaneous dictating and transcription
- Separates work on 4 selected tapes or "file boxes"
- Call in dictation, delegation, thoughts and ideas from any touch tone phone (i.e. home, airport, hotel, etc.)
- Built-in intercom system
- 600% faster than writing
- Acts as a telephone answering service, message recorder



—FREE—
POCKET RECORDER*
With every "MESSENGER" SYSTEM
*or 2 Insight Classics

Trust Lanier.

Call us today for a free evaluation of your needs.
536-7751



HARRIS

LANIER

HAWAII



Hawaii MEDICAL JOURNAL

(USPS 237-640)

Published Monthly for the

HAWAII MEDICAL ASSOCIATION
(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD

Founding Editor: HARRY L. ARNOLD JR., MD

News Editor: HENRY N. YOKOYAMA, MD

Assistant Editor and Book Review Editor:

DOUGLAS G. MASSEY, MD

Contributing Editors: STEPHEN R.P.K. BRADY, MD,

FRANCIS H. FUKUNAGA, MD,

CHARLES S. JUDD, JR., MD,

Managing Editor: CHARLOTTE BEAL

Editorial Assistants: BECKY KENDRO,

JUDI KINGREY

Copy Editor: GWENDOLYN CHANG HULLEMAN

Graphic Artist: J. CHARLES DAVIS

Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,

THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,

JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD

(Commissioner)

HENRY N. YOKOYAMA, MD

(Chairman)

STEPHEN R.P.K. BRADY, MD,

NATHANIEL P.H. CHING, MD,

FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,

JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,

JAMES P. MCGUIRE, MD,

DAMKERNG PATHOMVANICH, MD,

ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,

J.I. FREDERICK REPPUN, MD,

TERRY C.Y. WONG, MD,

SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD

President-Elect: JAMES LUMENG, MD

Past President: RUSSELL T. STODD, MD

Secretary: JOHN H.C. KIM, MD

Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD

Honolulu: JOHN T. McDONNELL, MD

Kauai: THOMAS GROLLMAN, MD

Maui: HELEN S. PERCY, MD

West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD

CALVIN C.M. KAM, MD

Alternate Delegates to AMA

WALTER W.Y. CHANG, MD

RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.

Post Office Box 833

Honolulu, Hawaii 96808

Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.

16 Bruce Park Avenue

Greenwich, Connecticut 06830

Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.



O.P.T.I.O.N. Care of Hawaii

A Home IV and Nutritional Service

PRESCRIBE INTRAVENOUS HOME CARE!

If hospitalization is not absolutely necessary, let O.P.T.I.O.N. Care's experienced I.V. team assist you in providing your patients with a successful home therapy. O.P.T.I.O.N. Care's full-service program ensures cost-effective therapy and satisfied patients.

JOIN THE LEADERS . . .
PRESCRIBE O.P.T.I.O.N. CARE.

WE HAVE THE SOLUTION FOR YOU®

For More Information **CALL 254-5841**

Pali Palms • 970 N. Kalaheo Ave., Suite C-106 • Kailua, Hawaii 96734

WITH A PERSONAL NET WORTH OF \$300,000 YOU CAN CALL A TEAM MEETING, ANYTIME, AT OUR PLACE OR YOURS

When you have substantial assets, and an annual income of more than \$75,000, coordinating your financial activities requires a team leader. A Private Financial Services Group Officer from Bancorp Hawaii.

You say when and where, and we'll gather all the necessary players from our team of Bancorp specialists, as well as your other personal advisors.

At your convenience, meet in one of our conference rooms, your own office or home. Call any time. After hours our round-the-clock message center will make sure we'll be back to you the very next business day.

It's personal, team banking. To make an appointment at one of our convenient PFS locations, call 537-8646.

he Private Financial Services Group
Only from Hawaii's leader



If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo)
	329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**

DRGs

A 73-year old man who had IDDM with neuromyarthropathy, fell and suffered compression fractures of the bodies of L1 and L3, besides other minor contusions and lacerations.

The shock to his system was considerable. He was hospitalized for 10 days with anorexia, nausea and vomiting, a paralytic ileus, dehydration, ketonuria and exacerbation of his diabetes that had been previously under control. Prior to the accident, he had been fully functional, ambulatory and active but had pains in and weakness of his legs.

Treatment was standard conservative and supportive, the chief element being bed rest and close monitoring of his diabetes, and i.v. hydration.

In-hospital, and for several weeks thereafter at home in a hospital bed, he was unable to sit up and had to eat while in the supine position. There was no way that he could have been discharged from hospital earlier than the 10th day, at which point he was wearing a Taylor steel support brace and was able to use a walker to get from bed to bathroom briefly. Convalescence at home with an overhead trapeze, aided by good family nursing care, took a total of seven weeks post-injury.

The hospital bill came to \$4,791.95. On the basis of Diagnosis Related Grouping (DRG), Medicare paid the hospital \$1,930.53 or 40% of the bill. To the Feds, a backache is a backache is a backache, period. Of the difference of \$2,861.42, the "other carrier" paid \$692. The hospital, consequently, was paid \$2,622.53. It had to kiss goodbye to \$2,169.42, or 45% of its charges, receiving payment of only 55 cents on the dollar and

mandated not to charge the patient for the balance.

This is obviously and grossly unfair to the hospital. It can be labeled as "indentured servitude," a system of punitive taxation against which the American Revolution was fought and won.

How can any hospital survive under this regime, you ask?

It can — and it does — break even, perhaps, but the mechanism is another scam, generated as well by the government.

For one, DRGs apply only to Medicare patients (and probably Medicaid). Younger patients have to pay the full — and understandably expensive — charges, expensive because the hospital has to make up its deficits, due to these DRG losses, somehow, or close its doors.

Secondly, if a patient is admitted and dies quickly, the DRG system allows the hospital to charge and collect the full amount per diagnosis — not per length of actual stay. If the patient recovers more quickly than usual and is discharged by his physician "early, by gentle persuasion," the hospital profits. Don't ever mention the possibility that "quality of care" is compromised by the too early discharge! That is a bureaucratic no-no!

The government is seriously thinking of legislation that would make this double-scam applicable to physicians as well as hospitals, and foreseeably to the young as well as the elderly — all in the name of cutting costs. The AMA is fighting hard to oppose this.

J.I. Frederick Reppun, MD, Editor

Boxing as "Sport"

Les Keiter, well-known local sportscaster and commentator, does the sports news for television station KHON-TV. He is an able, experienced, clear-spoken person, and occasionally decides to editorialize on some recent event. When he feels the urge to do so, his comments are usually hyper-critical in nature, although he also will provide commendation at times.

Recently, he was alarmed at the highly promoted heavyweight fight involving Leon Spinks, former Olympic and professional champion in one corner. Specifically, Mr. Keiter was disgusted and angered that promoters would push this aging performer into the ring when he obviously can no longer compete and is in danger of severe injury in the boxing ring. Keiter's attack extended to the organizers and promoters who are looking at nothing but dollars as they continue to provide "entertainment" with name fighters who have lost their skills.

To this writer, Mr. Keiter's attack had a hollow ring. He was angry with good reason at the professional boxing industry which would push such a lopsided contest. However, he avoided the real issue which is that American sports enthusiasts insist on calling professional boxing "sport."

Numerous precise and careful medical studies have demonstrated that the human brain is not capable of absorbing frequent and repeated blunt trauma without suffering injury. The picture of the punch-drunk fighter, numb and nearly catatonic at an early age, is a sad one which is familiar to almost


everyone in medicine.

It is to the credit of the American Medical Association, with the unanimous concurrence of the Hawaii delegation, that organized medicine has defined this sad fact (here in Honolulu in December 1984), and urged a ban on boxing. It has been called, among other things, destructive, corrupt and atavistic behavior, hiding behind the curtain of "sport." Strangely, our politicians have found similar animal contests to be brutal, odious, hideous and repulsive, and have therefore outlawed them. However, no such prohibition has been proposed within the halls of our legislature in regard to similar contests between human beings.

Gambling, corruption, fixed fights, and scrambled brains and scarred bodies for the performers; this is called "sport?" Mr. Keiter was correct in attacking the professional boxing industry for the Spinks fight, but he failed to acknowledge that Leon Spinks is merely a visible representative of an undeniable social blight.

Organized medicine has demonstrated the fortitude and conscience to attack this disgraceful activity in hopes of putting it to an end. Perhaps, in time, we can convince Les Keiter and similar influential sports spokesmen, that one must recognize the pathologic process, not just the symptom.

Russell T. Stodd, MD, Guest Editor



Sshh. Come a little closer.

Meet one of our undercover agents.

You see, Leinaala Mau does most of her best work behind the scenes.

As a business sales center representative, she's constantly on the prowl, looking for ways to improve your business communications.

Sometimes, it means tracking down the right new equipment.

Sometimes, it means stepping in to investigate and solve a problem.

And sometimes, it's just checking up on the current system.

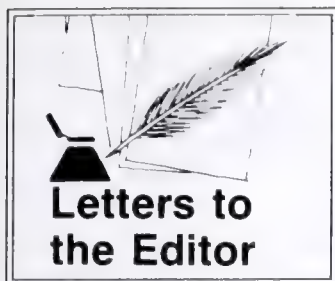
"Whatever it takes, that's what I do. I have to think fast, move faster, and be extremely resourceful. Saying it can't be done just isn't an option."

If you'd like to know someone's constantly watching out for your communication needs, you'll appreciate Leinaala's coverage.

Even if all you ever see . . . are the results.

HAWAIIAN TEL 

Beyond the call



The following was received from the AMA's MSR/MEM. We thought it worth calling to the attention of our members. Dr. Boyle is a former president of the AMA. He addressed this to the senior producer of the ABC show.

—Editor

Whatever the intent may have been, the recent ABC Close Up presentation entitled "Diagnosis: Malpractice" succeeded only in sensationalizing a very complex problem. The viewer was left with an inaccurate and frightening impression that each encounter with a physician is fraught with great danger. A great disservice is done by creating an atmosphere of distrust and fear among patients. The brief comment early in the program that the malpractice crisis is not the result of poor-quality care was lost in the visual impact and emotional reporting of isolated incidents.

Having contributed to its research data, we are at a loss to explain the absence of objectivity. We do not deny that negligence exists, but not to the degree indicated by the current level of litigation or the increased level of awards made by juries.

Physician discipline was given scant credit despite the joint actions of the Federation of State Medical Boards and the AMA to identify and eliminate errant physicians. Congressman Wyden was given great credit in the presentation, ignoring the fact that organized medicine was instrumental in helping draft and pass his legislation.

Insurance companies, highly regulated, were treated shabbily, especially by Robert Hunter, who repeatedly confuses insurance issues and is a spokesperson for the trial bar. ABC and he both have neglected to study physician-owned, nonprofit monoline insurance companies that clearly have suffered intolerable loss ratios.

Totally omitted were the inequities of a judicial system where 60% of premium dollars are consumed by the system and never reach injury patients or physicians in the current system.

We would have preferred that the program give some mention to the federal and state efforts to bring about changes in the tort system that preserves patients' rights while at the same time protecting hospitals and physicians against unwarranted litigation and excessive economic penalties. The cost of insurance under the current system is causing many physicians to curtail or leave their practices. One result is that some medical care, particularly in obstetrics, may be in short supply.

Medical care is an inexact science. Under the best of circumstances, unfortunate results occur. Our current system fails adequately to distinguish between unfulfilled expectations and negligence. The ABC program missed the opportunity to educate health care consumers on what they can do to protect themselves from substandard care, and how the current level of litigation is diminishing the availability of needed care, inflating the cost of health care and stifling innovative technology.

Given the huge number of patient-physician encounters ev-

eryday, the medical profession can be proud of its accomplishments. At the same time the medical care system has some shortcomings that physicians and their professional organizations are working hard to correct. We would urge ABC to schedule a second broadcast to complete the liability picture, and we would be pleased to contribute to the content of a second program.

James S. Todd, MD
American Medical Association
Senior Deputy Executive
Vice President
(Jan. 15, 1987)

RE: Editorial on DRGs

Thank you very much for your letter of February 4th and the opportunity to comment on the editorial written by Fred Repun, MD.

There is no question that DRGs have created inequities such as those described in Fred's editorial. It is, likewise, true that DRGs have served to exacerbate the 'cost shifting' that has been taking place ever since the advent of the Medicare and Medicaid programs, particularly in the last few years when there have been especially active efforts of the federal and state governments to pressure providers of service to reduce cost while maintaining quality.

I have just returned from Washington D.C., where I was part of a delegation from our Association who listened to some of the leading lights of the administration and Congress; i.e., Dr. William Roper, administrator of the Health Care Financing Administration; Senator Robert Dole, Senator Ted Kennedy, Representative Pete Stark and others.

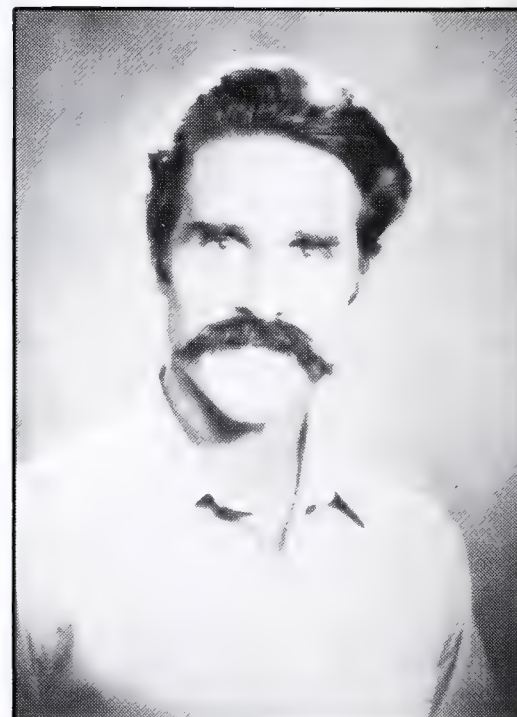
It is unfortunate, but true, that the message from the administration was a \$4 billion plus cut in Medicare and a \$1.5 billion cut in Medicaid. This action promises a battle in Congress, whose actions however will be tempered with the knowledge that Gramm-Rudman-Hollings dictates draconian budget cuts to impact on a \$200 plus billion deficit.

We must add to our other woes actions within the business community that are telling us that the practice of 'cost shifting' is one that they understand, but neither appreciate nor will they continue to tolerate hospitals doing it.

Fred's editorial is timely, generally accurate — I question the ability of Hawaii hospitals to substantially profit from shortened length-of-stay for any period of time — and appropriate. Unfortunately, the way I read the tea leaves "we ain't seen nothing yet".

Stanley B. Snodgrass
President/CEO
Healthcare Association of Hawaii

Message From the Director of Health



Food Irradiation

A controversy has been brewing recently regarding the Big Island's proposed food irradiation facility. The facility would completely eliminate the risk of fruit fly infestation in papayas and other food crops exported from Hawaii to the Mainland. The problem with food irradiation, as with fluoridation, is misinformation and public and professional concerns. The irradiation process is being utilized in more than 100 countries worldwide.

The proposed Hawaii facility will be using low-dose radiation from cesium or cobalt contained in nearly indestructible metal casings. The cesium can be transported by commercial airlines, can be rendered earthquake-safe and is similar to the radiation materials we use in medical diagnostic radiologic procedures and in radiation therapy. The Department of Health's main concern with irradiation relates to transportation of the materials, safety of the constructed unit, and possible adverse occupational exposure for employees. Public concerns relate to whether the food is safe to eat, carcinogenicity of irradiated food, creation of unique "radiolytic compounds" and environmental radiation exposure.

Extensive research on food irradiation has been done by the World Health Organization, the U.S. Department of Agriculture, the International Atomic Energy Agency, the Codex Alimentarius Commission of the United Nations, and the Center of Radiation Research at the Na-

tional Bureau of Standards. This and other research worldwide was summarized by the American Medical Association in a report to the U.S. House of Representatives' Committee on Agriculture, Nov. 18, 1985. This research was based on food radiation exposure levels of 1,000 kilorads; however, the radiation dose proposed for food irradiation facilities in Hawaii will only be approximately 15 kilorads. The research has shown no adverse effects or toxicity in irradiated foods.

Irradiated food does *not* become radioactive and can be handled immediately after processing. Despite claims to the contrary, no unique "radiolytic compounds" have been detected, even in the most minute concentrations, except those which have already been detected with other food processes such as boiling or freezing.

As to the nutritional effects, the research shows that only a minute amount of vitamin loss is caused by irradiation. More loss results from spoilage or other methods of disinfestation treatment. Trace losses of niacin, thiamine, riboflavin and beta-carotene were detected, but irradiation retains more of the original nutritional food content than double-dip treatment, which also requires harvesting before the fruit is ripe when the vitamin content is less. Irradiated papayas are harvested when ripe, yielding maximum vitamin content.

In essence, this type of irradiation is a cold process and the nutritional quality of irradiated foods is essentially of the

same quality as fresh food products.

Because microorganisms and parasites that cause spoilage are destroyed, irradiated foods are more likely to remain fresher than non-irradiated foods kept for similar lengths of time. At the low doses used, no new mutant or pathogenic microorganisms have been created or detected by the process in multiple worldwide studies.

Although food irradiation must be monitored closely in order to be sure that it is an occupationally safe and environmentally secure process, it is similar to hospital-based radiation procedures in this regard.

Because it has a number of potential applications in killing microorganisms that cause food spoilage, irradiation has the benefit of increasing the available world food supply and of reducing world hunger. It also has the important advantage of providing an alternative to post-harvest disinfestation of fruits and vegetables with pesticides, a troubling practice about which very serious health concerns exist.

Although the Department of Health will continue to monitor the literature and review the safety of the procedure, food irradiation appears at this point, for all the above reasons, to be a viable and safe process if properly applied.

The Department is interested in questions and concerns that physicians may have regarding this policy and we encourage you to write to us c/o Deputy Director for Environmental Health.

Asbestos Removal from Buildings: A Review

D.G. Massey, MD, FACP*

G. Fournier-Massey, MD, PhD*

Asbestos is present in the atmosphere around the world but this background concentration is generally low. That in schools and other buildings is at the same level and should present no greater risk to users, if the asbestos-containing building material is kept in good repair.

Removal of asbestos from buildings can disturb this equilibrium; higher fiber counts can result and may linger. Removal should be avoided if possible.

Introduction

The removal of asbestos from buildings has attracted the attention of the public, especially since the Environmental Protection Agency (EPA) required school boards to inform parents and employees of the presence of asbestos in schools. There is concern that removal of the asbestos may not always be in the best interests of the public, particularly if it is carried out under emergency conditions by poorly trained and/or ill-equipped workers.

This review will consider some of the complexities of the problem.

Fiber Identification and Counting

Although establishing the presence of asbestos fiber is crucial to proper management, there are numerous technical problems involved in identifying and counting them (Cossette).

A. Identification of Asbestos Fibers

This is not a problem when it comes to monitoring in asbestos mines and mills and in most asbestos-transforming industries, but it obviously is in urban areas, and in buildings such as schools where nonasbestos fibers abound.

The National Bureau of Standards (NBS) undertook a study on behalf of the Occupational Safety and Health Administration (OSHA) and concluded that existing OSHA procedure is useful only in determining total fiber content, not asbestos content alone. Thus, when fiber counts are mentioned, it should be borne in mind that nonasbestos fibers may be included.

Some laboratories are certified for identification of asbestos

fibers. Techniques include optical microscopy, electron microscopy, physical analysis and chemical analysis for magnesium and iron. Each has its advantages and limitations, as might be expected with such choices. For example, polarized light microscopy is sensitive and rapid but a fiber must be at least 1 μ m in its largest diameter to be analyzed, and considerable training in crystallography is needed (Cossette).

B. Counting Asbestos Fibers

Much of the regulatory legislation is based on the number of asbestos fibers in the air, because associated diseases such as asbestosis and bronchogenic carcinoma can often be understood on a dose-response relationship. However, as will be noted later, other diseases, such as mesothelioma, are not based on this principle.

The regulatory agencies equate dose to the amount of asbestos in the air. The federal occupational standard of OSHA is an eight-hour average of no more than two asbestos fibers greater than 5 μ m in length per cubic centimeter (f/cc) of air. Hawaii's standard is 0.1 fibers.

Asbestos fibers can be accurately counted by electronic microscopy (EM), preferably by transmission EM (TEM), since scanning EM is not a standardized technique and incidentally has poor ability to identify chrysotile fibers. Concentrations as low as 0.001 f/cc can be detected by TEM (Steen et al). However, demands of time, expertise and costs (\$200 to \$600) limit its use in routine monitoring.

Optical microscopy is more popular because it is rapid, requires limited expertise, and costs \$20 to \$50. However, it detects short fibers in a poorly reproducible way; thus, the total fiber count by optical microscopy correlates poorly with that of TEM (Pinchin). This limitation has been largely circumvented by specifying that only those fibers over 5 μ m in length shall be counted, and indeed there is then a significant correlation (0.978) between the number of fibers recognized optically and by TEM (Chatfield).

Optical microscopy is inaccurate when fibers are present in low concentration. Theoretically, it offers a minimum detection level of 0.02 f/cc, which is below the minimal regulatory standard, but from a practical point of view the minimal level detectable is much higher. It has even been reported that in many airborne dusts, phase contrast microscopy records only 2-25% of fibers longer than 5 μ m and perhaps only 1% of total fibers as determined by EM (Chatfield).

Accepted for publication March 1987.

* Pulmonary Research, Kuakini Medical Center; and the Department of Medicine, John A. Burns School of Medicine, Honolulu, Hawaii.

Correspondence: D.G. Massey, 347 North Kuakini Street, Honolulu, Hawaii 96817.

Thus, meaningful exposure measurements are best monitored by TEM, especially in complicated situations which require accuracy, where concentrations are low, or where short fibers are common. In other situations, less accurate but more rapid and convenient methods, such as optical microscopy, could be considered (Steen et al).

Background Concentration of Asbestos

Lanting and den Boeft have published a comprehensive review of asbestos in ambient air in various environments around the world which can be summarized as follows:

1. in general, background values do not exceed 0.01 f/cc;
2. urban concentrations are often higher, up to 0.023 f/cc;
3. in the vicinity of certain sources, such as crushed gravel roads, asbestos mines, mills, freeways, buildings under construction, etc., the number of fibers is often two-to-three times that of background levels and may reach 0.9 f/cc.

In contrast to the anxiety engendered by this widespread background presence of asbestos, it is reassuring to know that our ancestors breathed air with a concentration at least 0.001 f/cc. Drill cores from the Greenland ice cap have demonstrated that the asbestos content of the ice layers recently deposited did not differ from that of two million years ago (Lesage et al).

Other points should be mentioned. Environmental exposure continues for 168 hours per week, whereas occupational exposure, including in schools, is about 40 hours per week. Thus, the former could be 25% of the standard applied to the workplace and yet yield the same dose. Another factor is the presence of respiratory disease; in a patient with emphysema, one order of magnitude might be added as a safety factor for the environmental exposure.

Concentration of Asbestos in Buildings

A. The Undisturbed State

The atmosphere in buildings such as schools has typically contained the same number of fibers as the general environment (Cossette). Chatfield reported that public schools of Ontario, Canada, had levels below 0.04 f/cc. Le Guen and Burdett measured airborne asbestos fibers by a variety of techniques, including TEM, in four schools; none exceeded the regulatory standards. The Ontario Royal Commission on Asbestos concluded that the inhalation of asbestos by the occupants of schools does not normally pose a health hazard. This parallels the conclusion of the United Kingdom Advisory Committee on Asbestos in 1979. In contrast, the U.S. National Research Council Committee on Nonoccupational Exposure to Asbestiform Fibers (1984) concluded that such school exposure may well be hazardous, but added qualifiers.

B. Disturbing the Asbestos

The above-mentioned innocuousness of these airborne levels in buildings does not apply in the event of recent construction, repairs or removal of asbestos.

There is no doubt that fiber counts rise during the rip-out of asbestos materials, as described in graphic fashion by, for example, shipyard workers. This would be expected also to occur inside buildings. Pinchin investigated atmospheric fiber concentrations by the phase contrast microscopy technique of the National Institute of Safety and Health (NIOSH) and by TEM before and after asbestos removal from eight buildings (see table). Up to 12 samples were examined and the results averaged. He found a 13-fold increase.

Paik et al studied fireproofing materials on ceilings of 127 buildings throughout the USA and found asbestos to be present in over half. The airborne level of fibers during removal aver-

TABLE 1
Air Monitoring During Removal of Asbestos: Fibers/CC of Air

	Optical Microscopy Fibers > 5mu	Transmission Electron Microscopy Total Fibers	Fibers > 5mu
Before	<0.01	0.019	<0.004
After	0.03	0.256	0.012
Increase	3 fold	13 fold	3 fold

aged 16.4 with dry methods, but remained under 2 f/cc with wet removal. "Dry removal" is the stripping of building materials without wetting them; "wet removal" is their removal in their wet state and the "amended wet technique" is the addition of wetting agents such as polyoxyethylene ester or ether.

Sawyer et al examined 40 removal projects which were judged as following closely EPA recommendations and so were considered as not representative of common work practices. Even in these, airborne fiber levels from the time of initial erection of barriers to final clearing rose to 37 f/cc. Dry removal resulted in a mean level of 38.9 f/cc, untreated water removal 28.6 and EPA-amended water methodology 1.1 f/cc. Bagging of the debris resulted in a higher airborne contamination (3.8 f/cc) than the actual removal of asbestos from structural surfaces.

What happens outside the immediate work area? Sawyer et al occasionally detected contamination outside the work area containment barriers despite the excellence of asbestos removal methods. Pinchin found a concentration of up to 2.2 f/cc.

How long does this increase of fiber content persist after removal? Little evidence is available. Bozzelli and Russell examined the effects of removing asbestos from ceilings of several public schools where concentrations of 5% - 20% existed. The increased fiber count of the air fell by 56% - 90% in about a week after removal was completed.

In conclusion, asbestos in buildings, including schools, is best left in situ if it can be kept in good condition; it is likely to pose a danger only when it is removed. Surely it is more cost-effective to spend modest amounts of money on good maintenance, rather than much more on removal. In 1984, \$1,613,000 was released by the state of Hawaii for removal of asbestos at the University of Hawaii.

Potential Hazards

Exposure to asbestos can result in fibrosis and malignancy. The induction of much of this disease can be understood in terms of a dose-response relationship; i.e., a small exposure can lead to pleural fibrosis and plaques, a greater one to diffuse fibrosis of the lungs (asbestosis). Heavy exposure can lead to COPD and lung cancer. Important also is the time of onset, and duration of the exposure.

Dose-response relationships are not the only explanation for asbestosis, however. The relationship is not as linear as indicated. The response is also influenced by the kind of exposure, the type of asbestos, the length of the fibers, concomitant smoking, radiation, and even perhaps by ethnicity (Fournier-

(Continued on page 157)

News from  about a new dosage form of cephalexin

ANNOUNCING NEW

KefletTM **TABLETS** **cephalexin**

**All the advantages of cephalexin
in a convenient tablet form**

- Backed by over 15 years of clinical experience
- Smaller tablet is specially shaped and coated for easier swallowing
- May enhance patient compliance, particularly among the elderly
- Tablet dosage form may be appreciated by patients of all ages

NEW Keflet Tablets are available as:

250-mg
Tablets



500-mg
Tablets

Keflet is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-sensitive patients.

Keflet™ Tablets

cephalexin

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Keflet™ Tablets (cephalexin, Dista) are indicated for the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Respiratory tract infections caused by *Streptococcus pneumoniae* and group A β -hemolytic streptococci (Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. Keflet is generally effective in the eradication of streptococci from the nasopharynx; however, substantial data establishing the efficacy of Keflet in the subsequent prevention of rheumatic fever are not available at present.)

Otitis media due to *S. pneumoniae*, *Haemophilus influenzae*, staphylococci, streptococci, and *Neisseria catarrhalis*

Skin and skin-structure infections caused by staphylococci and/or streptococci

Bone infections caused by staphylococci and/or *Proteus mirabilis*

Genitourinary tract infections, including acute prostatitis, caused by *Escherichia coli*, *P. mirabilis*, and *Klebsiella* sp.

Note—Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.

Contraindication: Keflet is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: BEFORE CEPHALEXIN THERAPY IS INSTITUTED, CAREFUL INQUIRY SHOULD BE MADE CONCERNING PREVIOUS HYPERSENSITIVITY REACTIONS TO CEPHALOSPORINS AND PENICILLIN. CEPHALOSPORIN C DERIVATIVES SHOULD BE GIVEN CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. SERIOUS ACUTE HYPERSENSITIVITY REACTIONS MAY REQUIRE EPINEPHRINE AND OTHER EMERGENCY MEASURES.

There is some clinical and laboratory evidence of partial cross-allergenicity of the penicillins and the cephalosporins. Patients have been reported to have had severe reactions (including anaphylaxis) to both drugs.

Any patient who has demonstrated some form of allergy, particularly to drugs, should receive antibiotics cautiously. No exception should be made with regard to Keflet.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semi-synthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Usage in Pregnancy—Safety of this product for use during pregnancy has not been established.

Precautions: General—Patients should be followed carefully so that any side effects or unusual manifestations of drug idiosyncrasy may be detected. If an allergic reaction to Keflet occurs, the drug should be discontinued and the patient treated with the usual agents (eg, epinephrine or other pressor amines, antihistamines, or corticosteroids).

Prolonged use of Keflet may result in the overgrowth of

nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when anti-globulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Keflet should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

Indicated surgical procedures should be performed in conjunction with antibiotic therapy.

As a result of administration of Keflet, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—The daily oral administration of cephalexin to rats in doses of 250 or 500 mg/kg prior to and during pregnancy, or to rats and mice during the period of organogenesis only, had no adverse effect on fertility, fetal viability, fetal weight, or litter size. Note that the safety of cephalexin during pregnancy in humans has not been established.

Cephalexin showed no enhanced toxicity in weanling and newborn rats as compared with adult animals. Nevertheless, because the studies in humans cannot rule out the possibility of harm, Keflet should be used during pregnancy only if clearly needed.

Nursing Mothers—The excretion of cephalexin in the milk increased up to 4 hours after a 500-mg dose; the drug reached a maximum level of 4 μ g/mL, then decreased gradually, and had disappeared 8 hours after administration. Caution should be exercised when Keflet is administered to a nursing woman.

Adverse Reactions: Gastrointestinal—Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely. The most frequent side effect has been diarrhea. It was very rarely severe enough to warrant cessation of therapy. Dyspepsia and abdominal pain have also occurred. As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

Hypersensitivity—Allergic reactions in the form of rash, urticaria, angioedema, and, rarely, erythema multiforme, Stevens-Johnson Syndrome, or toxic epidermal necrolysis have been observed. These reactions usually subsided upon discontinuation of the drug. Anaphylaxis has also been reported.

Other reactions have included genital and anal pruritus, genital moniliasis, vaginitis and vaginal discharge, dizziness, fatigue and headache. Eosinophilia, neutropenia, thrombocytopenia, and slight elevations in SGOT and SGPT have been reported.

PV2/11 DPP

[111/786]

Additional information available to the profession on request from



Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46285
Mfd by Eli Lilly Industries, Inc
Carolina, Puerto Rico 00630

720112

Massey and Massey). This absence of dose—response effect is seen in its extreme form in malignant mesothelioma. There is no doubt that asbestos is the major trigger in this rare but highly lethal tumor. However, the amount of exposure can be infinitesimally small and the exposure in the far distant past. The implication is that standards of air concentration of fibers that are so important in occupational exposure, can be unimportant in this instance and the potential for malignancy is always present.

Thus, regulations are not a guide to the management of all asbestos health hazards.

Management of the Problem of Asbestos in Buildings

Given an understanding of the principles mentioned in this review, the management of asbestos in buildings should be based largely on common sense. The EPA has established an algorithm to assess such risk but its reliability has been criticized (Findley et al). Although the release of asbestos from ceilings is the usual concern, release from floor tiles needs to be considered also because asbestos in tiles represents the third largest use of this mineral in the USA and in Europe. In a 10-year-old office building, fibers were released into the air from the crocidolite ceilings and the vinylchrysotile floor tiles, the result of weathering (Sebastien et al).

A. Prevention

The primary consideration is to prevent further contamination of the atmosphere. Thus, excellent maintenance of existing asbestos-containing building materials is the most appropriate action. Encapsulation with sealants such as latex paint, or complete occlusion of trouble spots may be necessary. Protecting easily-damaged areas with sheetmetal is the rule in the ship-building trade. The use of bonding agents by injection can stabilize areas prior to repair and painting. These techniques are also valuable in buying time until asbestos can be removed in a well-planned maneuver.

B. Active Management

Asbestos removal should generally be undertaken only as a last resort when a deteriorating situation cannot be controlled by good maintenance and when a final solution is desired.

Removal is analogous to removing mercury from a lake of water by dredging the bottom sediments. Not only will the mercury content of the entire lake increase due to stirring up the deposits, but the river into which the lake drains will be contaminated as well.

Stripping may be partial or complete. There is little to be said for the former, especially if the basic cause, such as a leaking roof, has not been repaired.

Timing should be carefully considered. School vacations are a particularly desirable time for such work (EPA 560/5.83 3/83) and removal may be delayed until then by interim maintenance by bonding, as mentioned above.

Employees and users should not be present in the building during removal work.

Asbestos removal firms should be competent and have adequate equipment such as respirators and high-capacity ventilators with EPA-approved filters in order to restrict spread of the fibers into the general atmosphere. Dry removal should not be undertaken. Removal after wetting with untreated water is preferable; the EPA amended water methodology is the most desirable. The latter will not be effective for the gray asbestos, amosite.

The air-conditioning and ventilation systems should be thoroughly screened off.

Monitoring should include sampling from the atmosphere both inside and outside the building and examined by TEM.

Monitoring should be continued after final cleanup until fiber counts are acceptable.

A number of asbestos substitutes are available, e.g., attapulgite, fiberglass, polyaramid and wollastonite (Cossette). However, these in turn may bring about problems, e.g. wollastonite workers have a high incidence of pulmonary fibrosis and bronchogenic carcinoma, and polyaramid fiber can be associated with hemolysis.

Discussion

This review draws heavily on experience with buildings in temperate climates with their airtight construction, air conditioning and sealed windows. The energy crunch beginning in the 70's restricted the use of artificial ventilation and air conditioning and the "sick building" syndrome appeared as a result of the build-up of substances dangerous to health.

The applicability to Hawaii of much of the evidence presented here is uncertain. In the workplace, asbestos exposure seems to be more benign than on the Mainland (Massey). We are fortunate in Hawaii to have so much open, single-walled construction, natural ventilation by the trade winds, and the almost entire reliance on chrysotile rather than the amphiboles to meet asbestos needs. Circumspection prior to removal is desirable.

REFERENCES

1. Cossette M: Defining asbestos particulates for monitoring purposes. American Society for Testing and Materials. Philadelphia, Oct. 13, 1982.
2. Steen D, Guillemin MP, Buffat P, Litzistorf G: Determination of asbestos fibers in air. Transmission electron microscopy as a reference method. *Atmos Environ* 17:2285-98, 1983.
3. Pinchin DJ: Asbestos in buildings. The Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario. Ministry of the Environment. Toronto, pp 1.11-12, June 1982.
4. Chatfield EJ: The Problems of the Measurement of Asbestos. Asbestos in the context of general issues. Royal Commission on Asbestos. Toronto Canada. Public meeting No. 2, pp 1-25, Dec. 12, 1980.
5. Lanting RW, den Boeft J: Atmospheric pollution by asbestos fibres. Instituut voor milieuhygiene en gezondheidstechniek, Organisatie voor toegepast-natuurwetenschappelijk onderzoek. Delft, Holland. Report G 908, November 1979.
6. Lesage M, Piuze LC, Smith WH, Gosselin M-A. Submission to the Royal Commission on matters of health and safety arising from the use of asbestos in Ontario. Quebec Asbestos Mining Association. Montreal, Canada, January 1981, pp 16-18.
7. Le Guen JM, Burdett G: Asbestos concentrations in public buildings: A preliminary report. *Ann Occup Hyg* 24:185-90, 1981.
8. The Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario. Ministry of the Environment. Toronto, Ontario, Canada 1984.
9. Paik NW, Walcott RJ, Brogan PA: Worker exposure to asbestos during removal of sprayed material and renovation activity in buildings containing sprayed material. *Am Ind Hyg Assoc J* 44:428-32, 1983.
10. Sawyer RN, Rohl AN, Langer AM: Airborne fiber control in buildings during asbestos material removal by amended water methodology. *Environ Res* 36:46-55, 1985.
11. Bozzelli JW, Russell JF: Airborne asbestos levels in several school buildings before and after bulk asbestos removal. *Int J Environ Stud* 20:27-30, 1982.
12. Fournier-Massey GG, Massey DG. Ethnicity and the response to asbestos. In: Amaduri S, ed, Asbestos: Directory of Unpublished Studies 2nd Ed. Barkley England. Elsevier Applied Sciences Publishers pp 124, 1986.
13. Findley ME, Rose VE, Cutter GR, Windsor RA: An assessment of the EPA (USA) asbestos hazard evaluation algorithm. *Am J Public Health* 73:1179-81, 1983.
14. Sebastien P, Bignon J, Martin M: Indoor airborne asbestos pollution: From the ceiling and the floor. *Science (Wash DC)* 216:1410-3, 1982.
15. EPA. Guidance for controlling friable asbestos-containing material in buildings. Report 560/5-85-024. June 1985.
16. Massey DG. Developments in asbestos-related disease. *Hawaii Med J* 43:182-4, 1984.

Red Blood Count, Hemoglobin and Red Cell Indices in Healthy Adult Orientals in Hawaii

Robert T.S. Jim, MD*

A study of RBC, hemoglobin and red cell indices in 488 healthy adults of Chinese, Filipino, Japanese and Caucasian ancestry in Hawaii were found to show no significant differences from values given for Caucasians in American hematology textbooks.

Data is not available in American hematology textbooks¹⁻⁴ on the normal red blood count (RBC), hemoglobin (Hb) and red cell indices in Orientals. However, two studies have been done on normal RBC and Hb levels in healthy individuals of Oriental ancestry in Hawaii.

In 1940, Hamre and Wong studied blood counts for normal children ages 3, 4 and 5 living in Hawaii and found no differences in RBC and Hb levels among Chinese, Japanese, Korean and Caucasians⁵.

In 1981, a study of 679 healthy student female nurses of Chinese, Filipino, Japanese, Korean and mixed Filipino-Japanese, Chinese-Korean, Korean-Japanese and Chinese-Korean ancestry, ages 18 to 21 years, revealed RBC and Hb values almost identical to those found in normal adult Caucasian females of comparable age group in Spokane, Wash.⁶

The present study further extends data on the RBC, Hb and red cell indices in healthy adult Chinese, Filipino, Japanese and Caucasians in Hawaii.

Materials and Methods

The health records of 488 healthy adult employees of Chinese, Filipino, Japanese and Caucasian ancestry from the St. Francis Hospital, Honolulu, Hawaii, were examined for RBC, Hb and red cell indices. The ages of these employees ranged from 16 to 65, with the majority in the 20-40 year range.

The records examined covered the years 1973-1986. The RBC, Hb and red cell indices (mean corpuscular volume or MCV, mean corpuscular hemoglobin or MCH and mean corpuscular hemoglobin concentration or MCHC) were done by the Coulter Counter-S; Hb was done by the cyanmethemoglobin method. Thirty-six employees with grossly abnormal RBC, Hb or red cell indices were excluded from the study (see Table 1).

Results

The median and range for RBC, Hb and red cell indices in 452 Orientals and Caucasians are shown in Figures 1-6 and

Table 2. No significant differences in RBC, Hb and red cell indices were found among the various Oriental groups or between Orientals and Caucasians.

Discussion

The RBC, Hb and red cell indices for healthy adult Orientals do not appear to be significantly different from values given for normal adult Caucasians as given in various American hematology texts. In the normals given in these texts the range and average RBC, Hb and red cell indices for Caucasians are similar to those in Orientals in Hawaii of both sexes.

FIGURE 1a
Frequency Distribution
by Race for RBC in Normal Adult Males

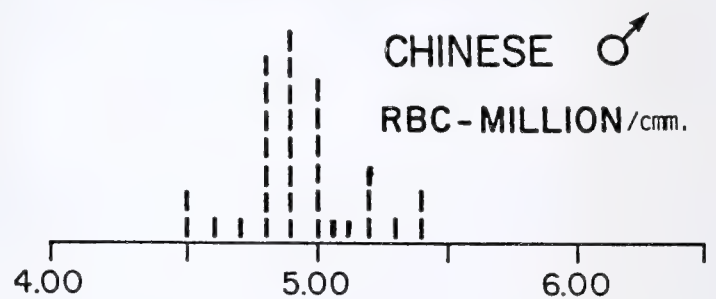
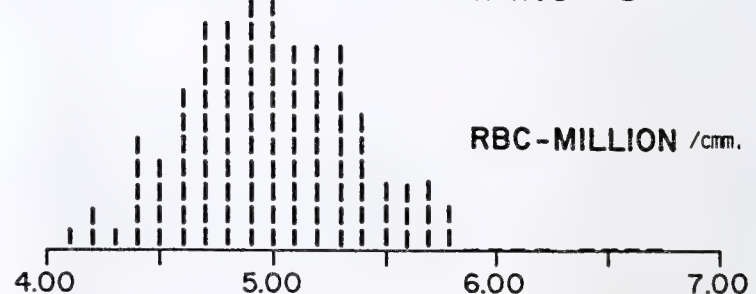


FIGURE 1b
Frequency Distribution
by Race for RBC in Normal Adult Males



Accepted for Publication January 1987

*Professor of Medicine,
University of Hawaii School of Medicine

COCAINE IS GETTING BETTER AND BETTER.

How many products do you know of where the quality keeps going up, while the price keeps coming down?

Well, that's just how it is with cocaine these days. The supply is plentiful. The purity is frightening. And, yes, the cost is way down: as little as five dollars can buy a hit of crack.

Unfortunately, the price the rest of us pay has gone sky-high. Not only is cocaine, in all its forms, more available, but the potency is resulting in a plague of mental and physical disorders, from acute anxiety and depression to sudden heart failure and death.

In just the last 12 months, there have been 7 cocaine-related deaths reported in Hawaii. Reported.

Then there's the crime and violence that go hand-in-hand with intoxication and addiction.

Some people still think cocaine is glamorous. Or harmless.

It isn't either.

And it won't go away if we ignore it.

If you have friends or family who use cocaine, get involved. Give them a rough time. Because, if you don't, it's certain the drug will.

COCAINE. IT'S NOT FOR ANYBODY.

Call for help or information,
24 hours a day: 537-1678.

A public service message from the Honolulu Council, American Association of Advertising Agencies and this publication. Typography supplied by Pacific Photo Engraving, Inc.; engraving supplied by Honolulu Graphic Arts, Inc.



In the previous study of normal student nurses of Oriental ancestry, slightly lower Hb levels were found in that age group 18-21 compared to normal adult Oriental employees of the St. Francis Hospital in Honolulu. The difference may be in sample size, methodology or age difference. Slightly higher Hb levels are found in the age group 30-60 compared to age 16-21 years. The average age for the St. Francis Hospital employees is higher than for the student nurses.

There is no evidence that the RBC and Hb levels are lower in healthy Orientals as compared with those in their Caucasian counterparts. Because thalassemia is prevalent in Hawaii among the Chinese and Filipinos, elevation of the RBC is a valuable diagnostic clue in the diagnosis of the thalassemia trait; information on the normal RBC in Chinese and Filipinos is therefore important.

ACKNOWLEDGMENT

Appreciation is expressed to Ann Mello, RN, St. Francis Hospital, Employees Health Services, for collection of blood count data.

REFERENCES

1. Wintrobe MM: Clinical Hematology, p. 1885, Lea & Febiger, Philadelphia, eighth edition, 1981.
2. Williams WJ, Beutler E, Erslev AJ and Lichtman MA: Hematology (third edition), p. 10, McGraw-Hill Book Co., 1983.
3. Greendyke RM, Meriwether WA, Thomas ET, Flintjer JD and Bayliss MW: A Suggested Revision of Normal Values for Hemoglobin, Hematocrit, and Erythrocyte Count in Healthy Adult Men. *Am J Clin Path*: 37:429, 1962.
4. Maile JB: Laboratory Medicine Hematology, p. 444, fifth edition, The C.V. Mosby Co., St. Louis, 1977.
5. Hamre CJ and Wong KKL: Hematologic Values for Normal Children, Three, Four and Five Years of Age Living in Hawaii. *Am J Dis Child*: 60:22, 1940.
6. Jim RTS: Red Blood Count and Hemoglobin Level in Healthy Student Nurses of Oriental Extraction in Hawaii. *Hawaii Med J*: 40:329, 1981.

FIGURE 1c

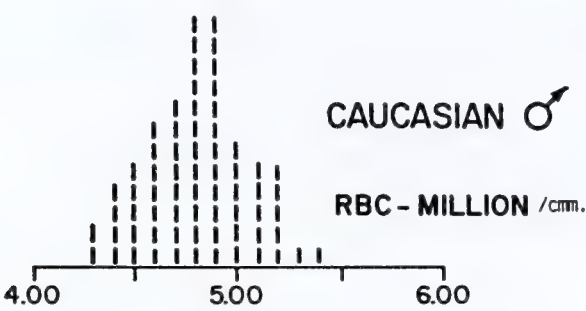


FIGURE 1d

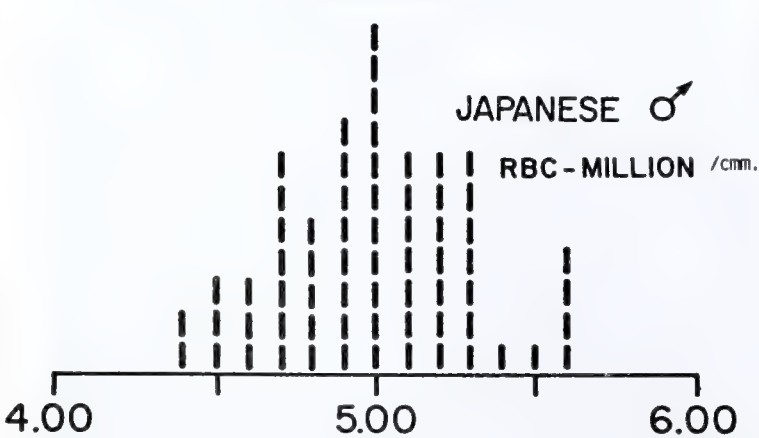


TABLE 1

RBC	Hb	MCV	MCH	MCHC
$\times 10^6$ /cmm	gms	μ^3	μg	%
Suspected thalassemia				
Filipino females				
5.99	13.0	68.2	21.7	31.8
4.92	12.3	76.9	25.0	32.5
5.16	10.7	64.8	20.7	33.5
5.13	11.7	69.2	22.8	33.0
Chinese female				
5.08	10.7	65.0	21.2	32.4
5.83	11.6	64.5	19.9	30.8
5.59	10.5	60.0	18.8	31.3
5.05	12.1	74.7	24.0	32.1
5.82	12.1	64.9	20.8	32.0
5.32	12.5	73.1	23.5	32.1
5.18	13.8	80.1	26.6	33.3
5.23	11.7	67.4	22.4	33.2
5.21	10.7	64.6	20.5	31.8
5.43	11.3	65.8	21.8	31.1
6.01	13.0	67.5	21.6	32.0
Chinese male				
6.07	13.2	71.0	21.1	31.1
6.32	13.4	64.5	21.2	32.9
6.40	13.2	67.0	20.7	30.7
5.83	13.1	71.1	22.5	31.0
6.27	13.3	68.0	21.3	31.2
Filipino male				
5.92	13.2	66.0	22.2	34.1
6.15	13.9	77.0	22.5	29.5
6.77	14.5	71.0	21.5	30.0
6.64	13.6	64.0	20.6	32.3
6.62	14.6	71.0	21.9	31.4
6.55	14.5	69.0	22.1	32.3
5.39	13.8	78.0	25.4	33.1
6.21	16.5	82.0	26.6	33.3
6.55	13.9	68.0	21.2	31.4
6.53	14.9	72.0	22.5	31.4
6.09	13.4	72.0	21.8	30.6
Suspected thalassemia or iron deficiency				
4.37	11.1	78.7	25.4	32.3 ¹
4.09	9.6	73.0	22.7	32.0 ¹
3.89	10.4	78.7	26.7	34.0 ²
4.80	10.1	71.0	21.2	30.0 ³
Macrocytosis, etiology unknown				
3.65	14.1	111	38.3	34.7 ³

(36 employees were excluded from Figures 1-6 and Tables 2a and 2b because of grossly abnormal RBC, Hb or red cell indices.)

1-Filipino female; 2-Chinese female; 3-Filipino male.

REAL ESTATE OPPORTUNITIES

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



WAIALAE IKI

Hoaina St. (Pictured) 4 bdrm, 3½ bath home with ocean views from every room. Indoor/outdoor lifestyle focuses around free form pool. Separate master suite. Fee pending. (33203) \$549,000 (L)

Vivian Fagan (R) 373-2351

Alaweo St. 4 bedroom, 3½ bath home featuring 2 master suites, huge livingroom, formal dining room, 2 fireplaces, pool & spa. 12,262 sq. ft. rim lot with 270 degree view. Fee pending. (32883) \$750,000 (L)

Edie Wiltgen (R) 737-2007

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

MT. TERRACE LUXURY CONDO \$275,000

WE DARE YOU TO COMPARE THIS HIGH FLOOR CORNER UNIT TO WHERE YOU ARE LIVING OR ANY COMPARABLE. 1,644 SQ. FT. DECORATED BY A BEVERLY HILLS DESIGNER WITH GENEROUS USE OF KOA, MARBLE, TILE, EXPENSIVE FABRICS IN DRAPES AND CARPETS. COOL AND QUIET. IMPRESSIVE 24 HOUR DOORMAN WITH SECURITY. NEW POOL AND RECREATION AREAS. MOTIVATED SELLERS LEAVING THIS MONTH. CASH SPEAKS.

4.6 ACRES KOKO HEAD

RARE OFFERING OF AG LAND JUST ABOVE KAISER HIGH SCHOOL. CURRENTLY INTO A TRUCK GARDEN FARM. OWNER WILL SELL ALL OR HALF OR SELL AND LEASE BACK. MANY POSSIBILITIES. CALL FOR PRICE AND TERMS.

CANTERBURY PLACE \$189,000

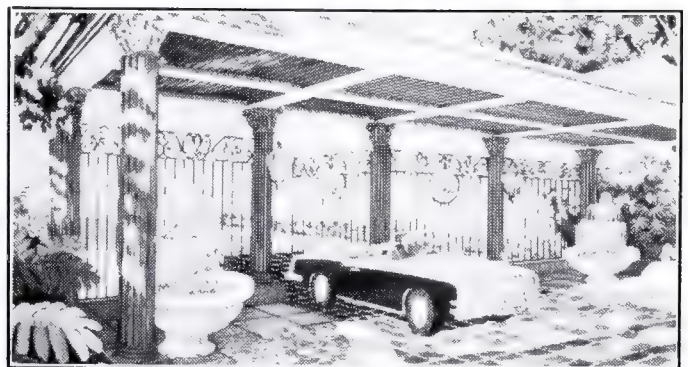
PENTHOUSE "E" UNIT JUST ON MARKET. NEED WE SAY MORE FOR THIS "HOT" PROPERTY. WE ALSO HAVE BOTTOM LINE INFORMATION ON TWO "D" UNITS. PLEASE GIVE US A CALL.

Duffy Ryzant LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 715, Honolulu, Hawaii 96815

Libbe & Company



THE WAIALAE PINNACLE

Just fifteen minutes from downtown Honolulu lies one of the most spectacular developments on the island of Oahu. Five magnificent homesites surrounded by lush preservation land. Each homesite with unsurpassed views and large enough to build your true dream home. Electronic wrought iron gates open onto cobblestone courtyard reminiscent of a Roman piazza. Palatial walls, dancing fountains and beautiful landscaping make this project a paradise in paradise.

Design your own home or we will design and build for you.

Homesites start from \$440,000 (fee simple)

1060 Young St.

523-1381

Hono., HI 96814



EXCLUSIVE LANIKAI RETREAT

OCEAN VIEWS abound in this spacious, custom home w/pool, huge decks and separate guest cottage. Private double lot only steps from your own secret sandy cove.

FEE SIMPLE..... \$1,275,000.

Call Mary Grosswendt 261-2334
or Joan Farrell 377-5712

Bradley
PROPERTIES LTD.
(808) 523-0456

733 Bishop Street, Ste. 1915, Honolulu HI 96813

REAL ESTATE OPPORTUNITIES



KOKO KAI

Rambling 4 bdrm./3½ bath home w/separate guest quarters. Excellent design for maximum privacy; an open, airy feeling. Updated kitchen & baths; tasteful decor. Half acre lush landscaped grounds, available in FEE. Gorgeous pool, spa; security, solar.

Asking \$539,000 (L).....MLS 30493

MARSHA STERN INC. (R) 373-2548

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

NUUANU DOWSETT



Nuuanu Stream and historic Auwai ponds create an unusual setting for this eight-year-old custom designed 3 bedroom, 3 bath, two-story contemporary home. Separate family room; library/guest room; enclosed laundry; dramatic vaulted ceilings in living/dining room. Enjoy cozy evenings around the fireplace. FEE SIMPLE.

MLS 32698. \$625,000.00

Call Susan L. Burgess (RA) 734-4242

HILL & CO.

specialists in fine residential properties

HONOLULU

373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821

REAL ESTATE SERVICES

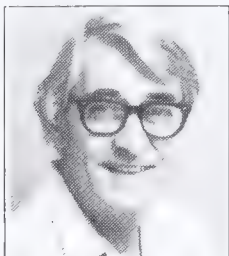
Member: The Honolulu Board of Realtors and MLS

**A TOTAL STAFF — AND REALTY SERVICE
IN WAIANAE**



Marie Hatfield (RA)

Larry Hatfield (PB)
Alyce Phillips (RA)
Madeline Mong (RA)
Doris Oshiro (RA)
Jill Johnson (RA)
Anne White (RA)
Sharon Moore (RA)



Paul Carter (RA)

Becky Lupski (RA)
Alberta Keamo (RA)
Arch Cook (RA)
Valerie Cook (RA)
Denise Martin (RA)
C. Gay Hatfield (RA)
Phylis Perry (RA)

**Call:
696-8415**

PROPERTY OF THE MONTH

2 bdrm. Waterfront Penthouse
Makaha Shores \$155,000

HAWAII HATFIELD REALTY CORP.

85-833 Farrington Hwy., Waianae

SALES • VA/FHA • MANAGEMENT • NOTARY

AFFORDABLE!!

FEE SIMPLE OCEANFRONT PROPERTIES

NIU. . . 2 bedroom 2½ bath two story home beautifully situated between the ocean and a spring-fed Koi Pond. Needs your decorating expertise. Ideal bachelor pad or retirees "house of tranquility."

\$375,000

WAILUPE. . . a delightful two bedroom two bath architect designed home is reached via a long quiet lane, far from the rush and noise of the highway. A family room, dining room, fireplace, open beam ceilings, workshop, and a hobby or gun room are just some of the extras here.

\$550,000

LANIKAI. . . this 2 bedroom 2 bath fixer upper or "tearer downer" is situated on a 10,000 sq. ft. lot in one of our islands more popular areas. Join the many who are building new estates in this wonderful spot.

\$425,000

KAILUA BAY. . . here is a brand new DREAM HOME reluctantly being sold by a couple who designed and meticulously built it for a lifetime of glorious oceanfront living. It is an adult house with three totally separated bedroom suites ideal for either individual privacy or suited for a BED AND BREAKFAST operation. A courtyard pool and spa complete this most inviting picture. A "MUST SEE"!

\$495,000

NORTH SHORE "PIPELINE". . . what a spot to spend the week-end or to retire to as soon as possible! The sights and sounds, view and beach are almost impossible to describe, they are so spectacular. This spotless 2 bedroom 1½ bath cottage by the sea is a true little jewel.

\$285,000



Waterfront Properties
INC.

1188 BISHOP ST., #2407

531-5311

FIGURE 2
Frequency Distribution
by Race for RBC in Normal Adult Females

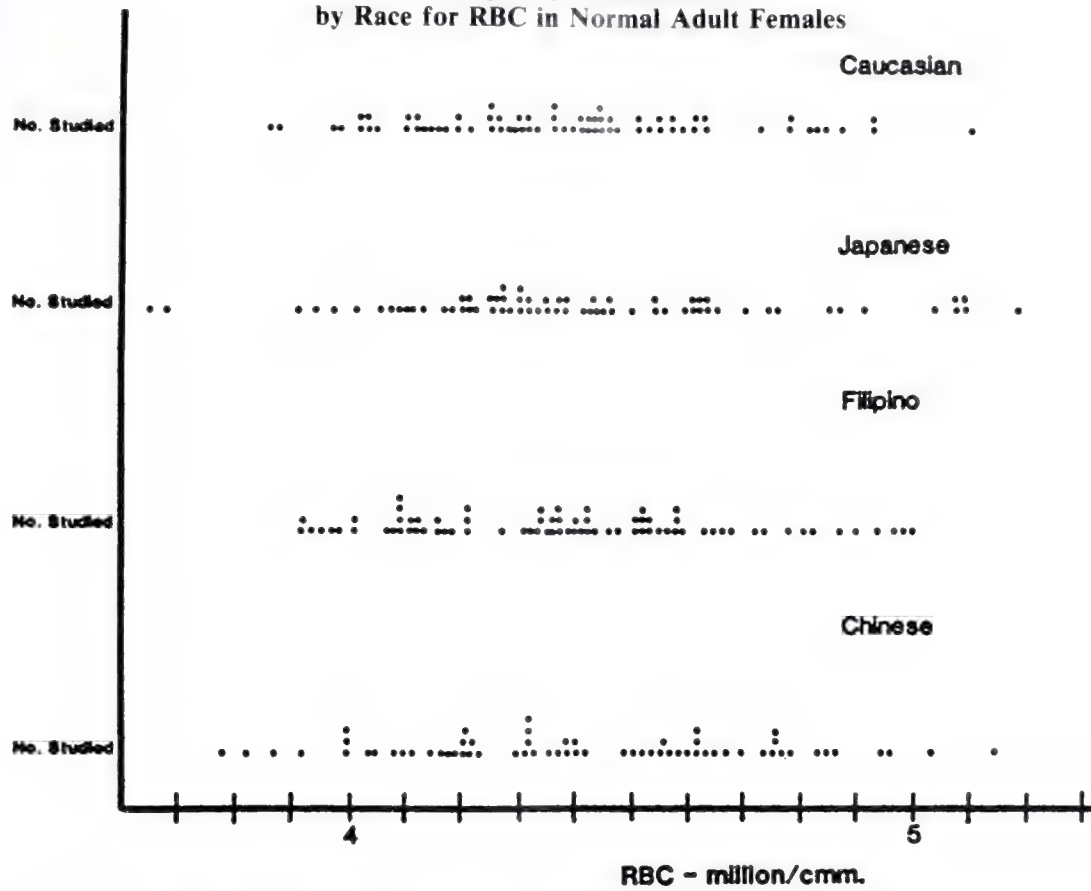


FIGURE 3
Frequency Distribution
by Sex and Race for Hb in Normal Adults

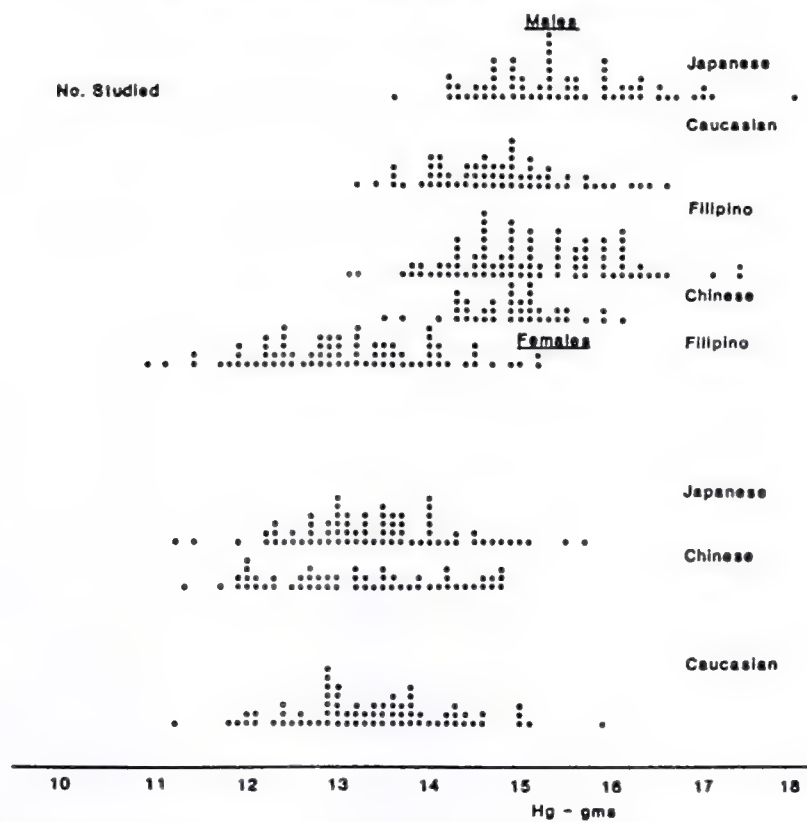


FIGURE 4
Frequency Distribution
by Sex and Race for MCV in Normal Adults

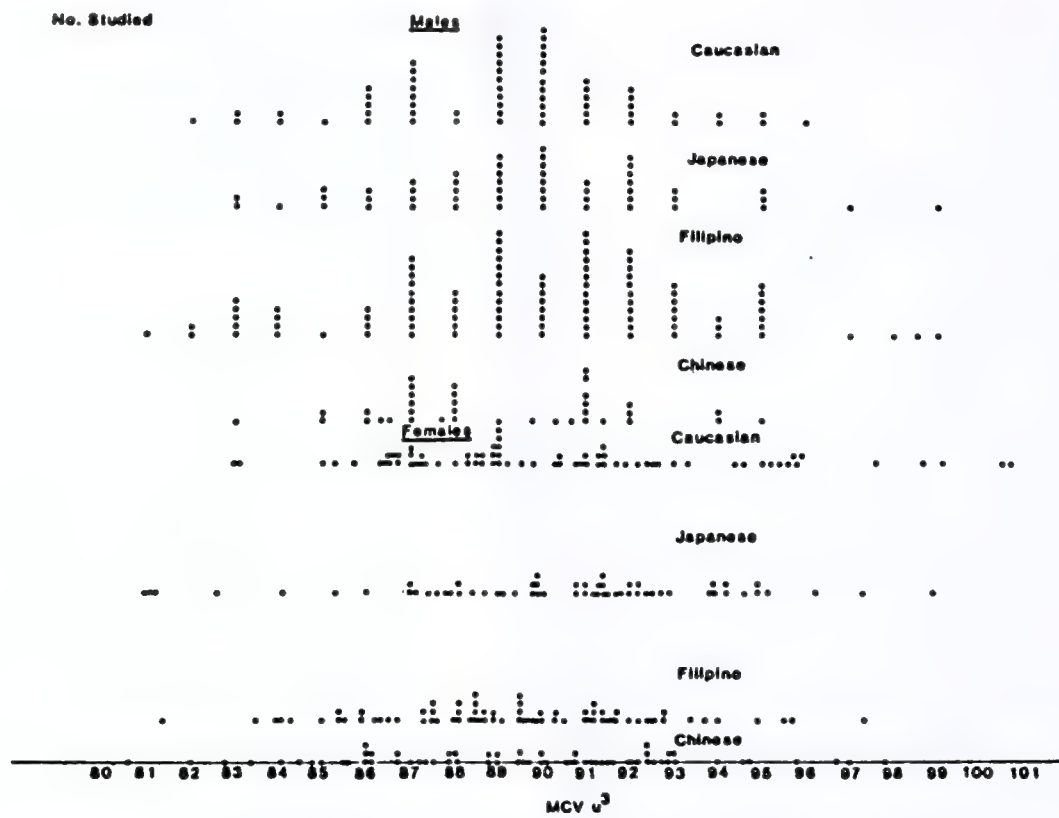


FIGURE 5
Frequency Distribution
by Sex and Race for MCH in Normal Adults

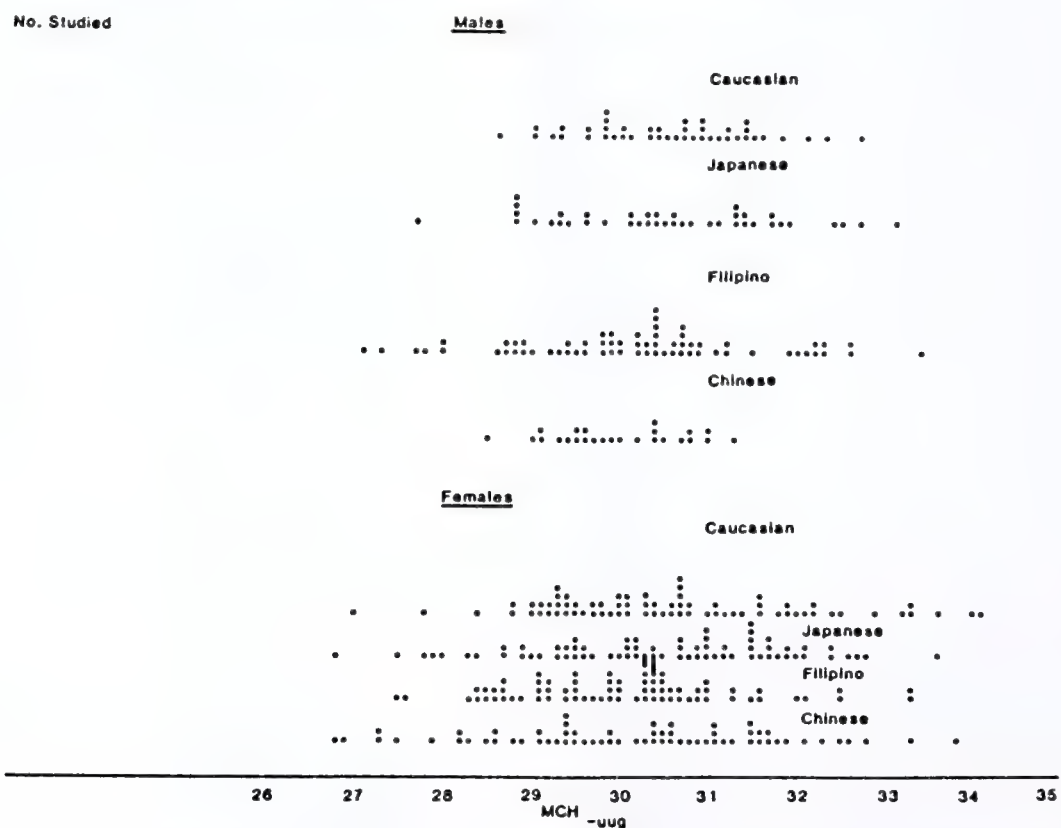


FIGURE 6
Frequency Distribution
by Sex and Race for MCHC in Normal Adults

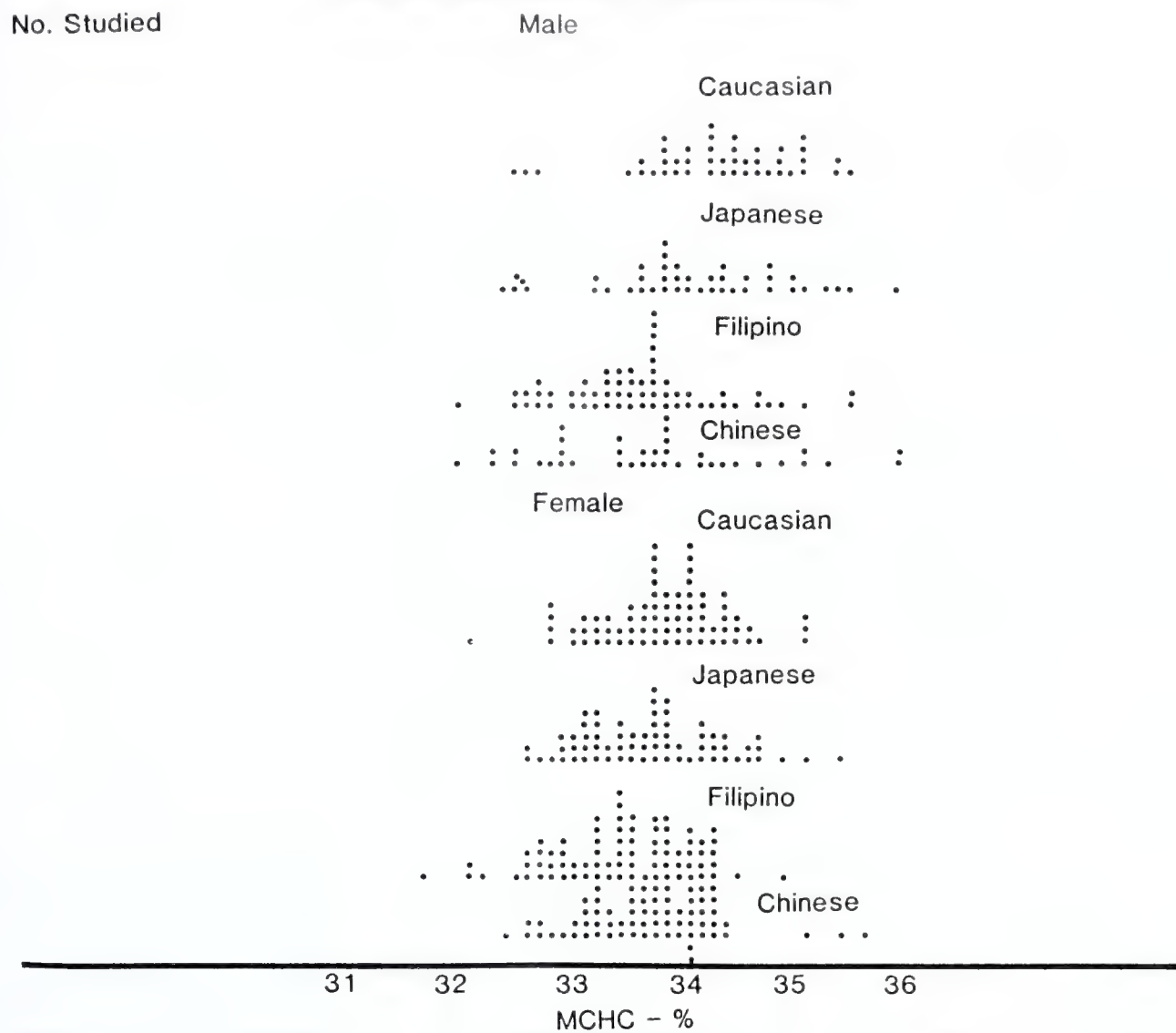


TABLE 2a
RBC, Hb and Red Cell Indices
In Healthy Adult Orientals and Caucasians in Hawaii
Compared With Hematology Texts

Hawaii
Male

No. employees	Race	RBC X10 ⁶ range	/cmm median	Hb gms range	median	MCV u ³ range	median	MCH uug range	median	MCHC % range	median
33	Chinese	4.50-5.40	4.92	13.5-16.1	14.8	81-95	88	28.5-31.3	29.9	32.1-35.9	34.3
72	Filipino	4.10-5.80	4.97	13.1-17.4	15.2	81-99	90	27.1-33.4	30.3	32.1-35.5	34.0
41	Japanese	4.40-5.60	4.99	13.6-18.0	15.7	83-99	91	27.7-33.1	30.4	32.5-35.9	34.2
43	Caucasian	4.30-5.40	4.80	13.2-16.1	14.9	82-96	89	28.6-32.7	30.6	32.6-35.5	34.3
Hematology texts											
			mean		mean		mean		mean		mean
Caucasian		4.40-6.00	5.20	14.0-18.0	16.0	82-101	91	27.0-34.0	31.0	31.5-36.0	34.0
		4.40-5.90	5.11	13.3-17.7	15.5	80.5-99.7	90.1	26.6-33.8	30.2	31.5-36.3	33.9
		4.40-6.00	5.20	13.0-17.0	15.0	80-96	88	26.0-32.0	29.0	31.0-35.0	33.0
		4.30-5.90	5.10	13.9-16.3	15.1	80-100	90	25.4-34.6	30.0	31.0-37.0	34.0

TABLE 2b
RBC, Hb and Red Cell Indices
In Healthy Adult Orientals and Caucasians in Hawaii
Compared With Hematology Texts

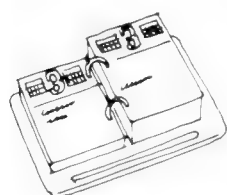
Hawaii
Female

No. employees	Race	RBC X10 ⁶ range	/cmm median	Hb gms range	median	MCV u ³ range	median	MCH uug range	median	MCHC % range	median
78	Chinese	3.77-5.14	4.46	11.3-14.3	13.1	80.6-97.8	88.2	26.8-33.9	30.5	32.5-35.6	34.1
81	Filipino	3.92-5.00	4.46	10.9-15.2	13.1	81.4-97.3	89.4	27.5-33.3	30.6	31.8-34.4	33.5
70	Japanese	3.65-5.19	4.40	11.2-15.7	13.4	81.0-98.9	90.5	26.8-33.6	30.2	32.7-35.4	34.3
70	Caucasian	3.65-5.01	4.40	11.2-15.9	13.5	81.2-100.7	89.0	27.0-34.1	30.7	32.2-35.1	33.7

Hematology texts

		mean		mean		mean		mean		mean
Caucasian	4.20-5.50	4.80	12.0-16.0	14.0	82.0-101	91.0	27.0-34.0	31.0	31.5-36.0	34.0 ¹
	3.80-5.20	4.50	11.7-15.7	13.7	80.8-100	90.4	26.4-34.0	30.8	31.4-35.8	33.6 ²
	not done ³									
	3.50-5.50	4.50	12.0-15.0	13.5	79.0-98.0	88.0	25.4-34.6	30.0	30.0-36.0	33.0 ⁴

1-Data Source Wintrobe, RBC & red cell indices by Electronic counter; 2-Data Source Williams, RBC & red cell indices by Coulter Counter S; 3-Data Source Greendyke, RBC & red cell indices by Coulter Counter A; 4-Data Source Miale, RBC & red cell indices by Coulter Counter S or Hemac Cell Counter



**Continuing
Medical
Education**

**CALENDAR OF ACCREDITED
EVENTS — CATEGORY 1**

Accredited Programs of CME allow one unit of AMA credit for each hour of instruction excluding all "breaks." Some programs also are accredited for AAFP prescribed credit.

**LOCAL ACCREDITED PROGRAMS
ONGOING**

For a complete list of ongoing programs, please refer to the March 1987 issue of the HAWAII MEDICAL JOURNAL. Further information is available through the individual institutions or through the HMA's CME Department.

SPECIAL EVENTS

All special events should be confirmed with the CME program sponsors, as cancellations are not necessarily reported to the HAWAII MEDICAL JOURNAL.

May 26-30, 1987	The Fifth Annual Cardiology Update, Institute for Medical Studies, Lisa Krehbiel, 30131 Town Center Dr., Suite 215, Laguna Niguel, Ca 92677, (714) 495-4499; co-sponsored by Straub Clinic & Hospital, Ray Itagaki, MD, 888 S. King Street,
--------------------	---

Honolulu, HI 96813, (808) 523-2311. Location: Honolulu.

June 13-21, 1987 Principles and Perspective in PTCA-State of the Art 1987, Pacific Heart Institute Southern California Society of Interventional Cardiac Angiography, (213) 829-1803. Location: Mauna Kea Beach, Kamuela

June 18-20, 1987 Coronary Heart Diseases: Current Concepts, Medical Education Resources, 5808 S. Rapp Street, Suite 202, Littleton, Co. 80120. Location: Honolulu

June 21-23, 1987 Arrhythmias: Interpretation Diagnosis and Management, Medical Education Resources, (800) 421-3756. Location: Sheraton Waikiki.

June 30-July 5, 1987 AIDS, Hepatitis: 1987 Update, co-sponsored with Reed Research Institute, Ms. Stacey Grace, Park West Building 250 Arapahoe Avenue, Suite 204, Boulder, Co. 80302, (303) 442-8173. Location: Sheraton Royal Waikoloa, Island of Hawaii.

Aug. 1-8, 1987 Ophthalmology, University of Southern California School of Medicine, 1975 Zonal Avenue, KAM 314, Los Angeles, Ca 90033. Location: Kamuela, Big Island of Hawaii.

Aug. 16-26 Aug. 23-Sept. 2, 1987 30th Anniversary Post Graduate Refresher Course, USC. School of Medicine Postgraduate Division, 3500 S. Figueroa, Suite 217, Los Angeles, Ca 90007, nationwide (800) 821-5094. In California (800) 521-6511 or (213) 746-1384. Locations: Honolulu/Maui; Maui/Kauai.

HOW TO REDUCE RECEIVABLES

WITH MIBS

MEDICAL INFORMATION and BILLING SYSTEM

MIBS is an advanced outpatient medical billing system. MIBS is a total in-house system utilizing an IBM PC/AT or PC/XT. MIBS is designed for Hawaii's Physicians including extensive capability for HMSA insurance claim processing. This system offers the following advantages:

- **Daily Billing**

Processing billing statements daily or weekly improves cash flow and evens out clerical workload. A patient's first statement is based on when the first charge is available for billing. Accounts with an existing balance continue to receive one statement per month at the same time of the month. Daily billing improves cash flow by reducing the time between a patient's first visit and their first bill.

- **Collection Letters**

The practice can design and automatically generate collection letters for delinquent accounts. Practice generated collections letters are many times as effective as those sent by a pre-collection service.

- **Statement Dunning Messages**

Dunning messages on billing statements are based on the age of the account balance. This allows the practice to communicate the delinquency of the account to the patient.

- **Payment Plan**

Budget payment plans or "promise to pay" amounts can be set and tracked by MIBS. Budget payment amounts are printed on the billing statement.

- **Service Charge**

Assessing a service charge improves the collection rate. Many patients pay their accounts earlier to avoid a service charge.

- **Delinquent Account Report**

MIBS generates a report of delinquent accounts based on user specified criteria allowing the practice to focus collection efforts.



MIBS: MEDICAL INFORMATION and BILLING SYSTEM

Advanced medical billing + IBM PC Equipment (PC/XTTM or PC/ATTM)
+ extensive PPMS training + professional service + continuous support

For a DEMONSTRATION on how MIBS can improve your MEDICAL BILLING
Call Bill Liggett at 521-2397.

PPMS

Pacific Professional Management Systems, Inc.

1188 Bishop St. Suite 3010 Honolulu, Hawaii 96813 Ph. 521-2397



The Hawaii Academy's 1987 Annual Meeting, February 12 through 17, 1987, once again included a joint scientific session with the Canadian College of Family Physicians, B.C. Chapter. As in previous years, it was a great success, both educationally and socially. The only fly in the ointment proved to be the weather, which for once did not cooperate. It rained all four days of the conference. That did not dampen the enthusiasm of the 350 registrants, however, and it may have increased attendance at the scientific sessions.

These sessions were judged excellent by participants and speakers alike. The guest speakers included Drs. Anthony Chow, Gary Feinstadt, Phil Gold, Peter Grantham, David Li and Larry Reynolds from Canada and Drs. Hiram Curry, Ralph Cutler, George Dean and Elliot Rapaport from the U.S. Mainland. In addition, many fine local speakers contributed their outstanding expertise to the conference.

Social programs included a welcome reception, a luau and the HAAP Annual Banquet.

Milton Howell, named Hawaii Family Physician of the Year for 1987, was honored in a special ceremony during the Annual Banquet. He returned to Hawaii, just for that occasion, from Seattle where he is currently doing locum tenens work and visiting with his daughter's family. He recently was similarly honored by the HMA and the extensive writeup by Fred Reppun in the March HMJ needs no addition here. Suffice it to say that Howell honors all of us by being one of us!

At the annual banquet, Richard Inskip, AAFP Immediate Past President, installed the following new officers and Council members of the Hawaii Chapter: Donald Farrell - president; Jennifer Frank - president-elect; Izumi Kobashigawa - secretary; Lily Ning - treasurer; Bernard Chun - delegate to AAFP; Nathan Wong - alternate delegate; Councilors thru 1989: Kenneth Ing, Howman Lam and Nathan Wong; councilor thru 1987 (for Izumi Kobashigawa) - Paul Lin.

In his keynote address, Inskip spoke with great enthusiasm about the AAFP campaign, conceived largely by him, to familiarize the American public with the specialty of family practice through a public relations program including advertisements in major publications throughout the United States. Apparently, the Academy is overwhelmed by the response to these ads, which include a coupon that readers may return to request further information and a list of family physicians in their area.

The Hawaii chapter ran this ad as part of 'Family Physicians' Week in Hawaii' in both the Honolulu Advertiser and the Star-Bulletin on February 11, 1987, with an excellent response locally.

As a result of the success of Hawaii Review '87, HAAP is exploring the possibility of future joint meetings with Mainland chapters of the Academy, perhaps as soon as 1988. Stay tuned and aloha!

Marlies H. Farrell
Executive Director HAAP

Council Capers — March 12, 1987

Bingo, here I go again to another Council meeting last Friday, the 6th. After leaving beautiful, sunny Maui, Will Iaconetti and I arrived in cloudy, rainy Honolulu, minutes later.

As pre-ordained by my travel agent, I got into a decrepit white '85 Dodge Arrow from Dollar Rent-a-Car. This car whistled and shook like its regular run was from Wailuku to Hana, Maui. Getting caught in traffic, I arrived late at the HMA Building. After turning off the ignition, there was an agonial engine tremor.

Sheepishly entering the Council meeting, I had to weave my way, plate dinner in hand, to an empty seat, seemingly two miles from the door.

***New HMA Building - The limited partnership for the HMA Building has been progressing well. There are only a few more weeks to subscribe. Very few Maui County members have subscribed. Please get on the ball, this is an excellent investment personally, or for your pension goals.

*Chicken Skin: Sue Irvine, the HMAA president, reported that, many years ago the Maui County Medical Auxiliary presented a monetary scholarship to a deserving University of Hawaii medical student from Maui. He was so grateful for that gift that, in appreciation, recently (he now is in practice in Hilo)

he returned a check for close to a thousand dollars to our Auxiliary to perpetuate further scholarship gifts.

***Just what does the HMA do for us?

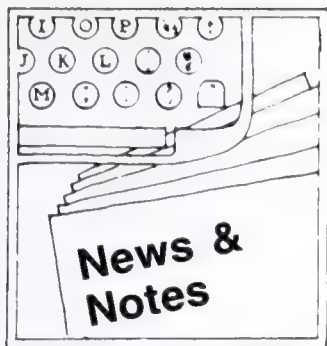
I pay a hell of a lot in dues! The longer you are associated with the organization, the more you are impressed with the scope, dedication and unselfish help the HMA and its staff expend on our behalf. Especially being on the outside islands where we cannot appreciate the work that HMA does, please believe me, we owe a lot to the HMA staff for all their work.

The legislative session is now midway in their program. Over sixty bills and measures are being considered. I can attest to the effectiveness of HMA's approach and will not even delve into any of the different bills.

Tip-of-the-Month - While I was in Hong Kong, my two favorite dishes were Roast Goose and Suckling Pig. A famous restaurant four stories high was built by a cook famous for his roast goose expertise, after his humble beginnings on street stands.

Dynasty 1, 3 blocks from the Ilikai Hotel in Waikiki, remains my favorite restaurant in Honolulu. A few months ago I hosted the Maui delegation to dinner there.

Denis J. Fu, MD



HENRY YOKOYAMA, MD

Titters & Guffaws . . .

(Excerpts from "Medicine's Funny Bone,"
Medical World News July 14, 1986)

Principles of dermatology:

If it's wet, dry it.

If it's dry, wet it.

If neither of these works, use steroids.

If steroids don't work, do a biopsy.

Surgeons do it.

Internists talk about it.

Radiologists just look at the pictures.

Patients come to ophthalmologists about their eyes but also for other things. This woman came into my office and looked around to make sure no one was listening. She said, "I really am here about my eyes, but I have another problem maybe you could help with. I have terrible trouble holding my water. What do you advise?"

"I advise you to get off my carpet."

Life in These Parts . . .

Walter S.Y. Chang, President of HMA, wrote in a letter to the Editor: "The Hawaii Medical Association, a statewide membership organization representing over 1,700 physicians throughout Hawaii, applauds Gov. John Waihee's selection of a medical doctor to fill the post of health director. Today's highly complex, everchanging health sector offers new challenges and we feel that Dr. John Lewin, a long-time HMA member, is well-qualified to meet these challenges . . ."

The mysterious outbreak of vomiting and diarrhea that affected nearly 75 persons at the U of Hawaii subsided by mid-February . . . Don Char, student health service director, says the main suspect was a virus, not food poisoning . . . The search for the cause continues . . .

Isle smoking foes testified at the Senate and House Health committees . . . John McDonnell, speaking for the HCMS and the Hawaii Allergy Society, called exposure to cigarettes "extremely deleterious, preventable and something which should not be allowed to continue . . ." Health Director John Lewin had pushed for increased taxes on tobacco products to pay for treatment of tobacco-related illness, but recommended the tax issue be deferred to next year.

Straub, which had introduced mall-walking at the Windward Mall last year and at the

CLASSIFIED NOTICES

To place a Classified Notice call Margie at 521-0021.

4 line minimum, approximately 5 words per line.

Payment must accompany order.

EMPLOYMENT OPPORTUNITIES

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible Obstetrician-Gynecologist needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:
D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793

(An Equal Opportunity Employer)

ISLAND FEVER?

Respected Internist desires to switch practices for a short time. Good salary. Good living conditions. Glen Deutsch MD, 410 Division St., Buffalo, MN 55313.
(612) 682-3325

PEDIATRICIAN

KAUAI-Needed for expanding quality oriented and accredited, 40 physicians, multi-specialty group, practicing in modern (non-profit hospital affiliated) out-patient facility. Competitive starting compensation. Malpractice insurance coverage provided. Full stockholder status eligibility within 2 years, 4 weeks paid vacation plus 2 weeks scientific meetings and travel reimbursement, disability and life insurance, tax sheltered pension plan, etc. Contact Robert Burnett MD, Medical Director, Kauai Medical Group, 3420-B Kuhio Hwy. Lihue, Hawaii 96766.
Ph. (808) 245-1500

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible General Internist needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:

D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793

(An Equal Opportunity Employer)

HAWAII: BEAUTIFUL KONA COAST
Board certified or eligible Pediatrician needed to work in modern and new multispecialty clinic for the largest H.M.O. in the State of Hawaii. Excellent fringe benefits. Full malpractice coverage. Salary negotiable. Write:

D. McCleary, M.D.
Kaiser Wailuku Clinic
Wailuku, HI 96793

(An Equal Opportunity Employer)

BUSINESS OPPORTUNITIES

FOR SALE-established family practice island of Kauai. Fully equipped & staffed. Contact Dr. De Alday 1-338-1664 or write P.O. Box 849, Waimea, Hawaii 96796.

FOR SALE

Medical/Surgical Practice. Prime location. Maui Clinic, Kahului, Maui. Surgeon retiring. 735-5887.

FOR SALE

50% OFF PREVIOUSLY OWNED medical, laboratory, office, x-ray, ultrasound equipment. We buy, sell, broker, repair. Medical Equipment Resale, Inc. 24026 Haggerty Rd., Farmington Hills, MI 48018; 1-800-247-5826, (313) 477-6880.

SERVICES

BOOKKEEPING & BILLINGS

For medical professionals.
Prefer part-time. Refs. available.
Call 949-2015 or 526-1818.

TAGS

AUTO REGISTRATION SERVICE

No more standing in line.

- Registration Renewals
- Title Transfers
- Traffic Clearance
- Pick-up And Delivery
- And much more!

31 N. King St. Ph. 524-6791

OFFICES

- Finished office space Kaneohe 900 to 1500 sq. ft.
- X-RAY OFFICE also available. Gerell + Assoc. 524-5417

Has parking been a problem for you and your clients? Call us today! We have the office space for you with ample free parking. Bobbie Martinsen (R) 521-0321
HAWAII MANAGEMENT CORP.

POSITIONS WANTED

SURGICAL PA-C

Seeks position with private surgeon or surgical group. Write: Lisa Lombardi 4025B Kulamano St. Hon., HI 96816.

Endangered Species

The American physician isn't extinct. But your freedom to practice is endangered. Increasing government intervention is threatening the quality of medicine—and your right to function as an independent professional. The government, responding to myriad cost-containment pressures, has taken a greater role in legislating reimbursement methods, payment levels and even access to care.

You can fight back. The American Medical Association is your best weapon. No other organization can so effectively reach the national policymakers who will help determine your future and the future of medicine. Join the AMA. We're fighting for you—and your patients.

For information, call collect (312) 645-4783

The American Medical Association
535 North Dearborn Chicago, Illinois 60610

AUTO LOAN

Two door
or four
door—start
at OUR door.
When you
need a loan
we'll be there.



Central Pacific Bank
The Art of Service
Phone—544-0500

Doctors get sick too

And when they do,
Connecticut Mutual
protects their income.

- High Benefit limits to replace lost income.
- Coverage is non-cancellable and guaranteed.
- Proportionate benefits when only you can work part time but still need a full-time income.
- Rehabilitation benefits 24X monthly benefit in addition to monthly benefits.



Custom design an income protection plan that fits your special needs, call today! 941-3000

Foster K.C. Lau
Connecticut Mutual Co.
1600 Kapiolani Blvd., Suite 1130
Honolulu, HI 96814

An associate of the **CM Alliance**

Pearlridge mall, is now extending its mall-walking fitness program to Kahala Mall . . . Walkers are encouraged to stroll the malls between 8 a.m. and 10 a.m. daily and a Straub nurse on duty will monitor their progress with blood pressure and weight measurements each week . . .

The nationwide Caesarean rate has quadrupled since 1970 to 23% of all deliveries in 1985 . . . The reasons are malpractice liability, advances in technology, scheduling convenience, older mothers, and a desire for perfect babies . . . Ralph Hale, chairman of the U of H OB/Gyn Department, feels that one reason behind the increase is the fear of liability . . . "In some cases in which the woman is in labor, and things are not going right, doctors will take the conservative approach. They will not have the baby delivered vaginally because they don't want to take the chance of anything going wrong." "With the advance in electronics and monitoring technology, physicians can detect fetal distress in pregnancy . . ."

"Our need was to get a place to store the books, their need was that they wanted some . . ." Irwin Schatz, chairman of the UH Department of Medicine and project coordinator William Lau, chief of the UH Division of Infectious Diseases, sent 50 years of accumulated medical tests and journals in 150 cartons to the Suzhou Medical College in China . . . United Airlines picked up the flying fee . . .

The following UH OB-Gyn research projects were funded by the Hawaii Heart Association: Richard Grillory, PhD, studying Mevinolin and its effect on cardiac energy metabolism; Kerry Yasunobu, PhD, structure of the cardiac cell membrane; Irwin Schatz, MD, clinical research on mitral valve prolapse, its causes and effects . . .

Miscellany

(Excerpts from *Medical World News* Jul 14 1986: "Medicine's Funny Bone")

A surgeon, an internist and a GP went duck hunting . . . The surgeon sees a duck, shouts, "Duck!" and shoots it down . . . The internist sees a duck, shouts, "Duck! Rule out quail! Rule out pheasant!", and shoots it down . . . The GP sees a duck and blasts it with a burst from his submachine gun . . . The tattered carcass drops to the ground . . . He remarks, "I didn't know what the hell it was, but I sure got it!"

* * *

Doctor: Tell me, sir, are there any diseases that run in your family?

Patient: Well, my granddaddy died of cerebral hemorrhoids and my grandma died of smilin' mighty Jesus. My sister has sick-as-hell anemia. My aunt has the gouch and she's got fireballs of the Eucharist. And then my father has high blood, my mother has low blood and like I said, I got bad blood.

Elected, Appointed & Honored . . .

The Honolulu County Medical Society elected John McDonnell, president; Ronald Peroff, president-elect; Hing Hua Chun, sec-

retary; Steven Wallach, treasurer . . .

Arnold W. Siemsen, director of the Renal Institute of the Pacific at St. Francis Medical Center, was awarded the Commissioner's Special Citation of the Food and Drug Agency for his work with gastroenterology/urology devices for the Agency . . .

On Maui, Helen Percy was elected president of the Maui County Medical Association; David Heeney, vice president; and Leonard Sakai, secretary-treasurer . . .

Internist David Sakamoto, who served as acting medical director and staff physician at the UH OB-Gyn Student Health Service, has been appointed "risk manager" at the Wahiawa General Hospital. David will ensure quality service to the patient, and will help identify medical risks and select the best treatment alternatives to avoid medical malpractice . . .

The West Hawaii Medical Association elected Ken Grant, president; Scott Mandel, president-elect; and Mike Nichols, secretary-treasurer . . .

Blood Bank of Hawaii elected the following physicians: Julia Frohlich, president; Noboru Oishi and Drake Will, three-year trustees; and Walter W. Y. Chang and John McDonnell, one-year trustees . . .

Raymond Fodor was elected president of the Hawaii Society of Otolaryngology-Head and Neck Surgery Inc.

Entrepreneurs . . .

Two physician groups in Kailua-Kona joined The Queen's Health Systems to form the Kona-Kohala Health Care Service, Inc. The physicians are Kevin Kunz, Richard Pekala, Stephen Denzer, Alistair Bairos, Donald Nikaitani, James Mitchell, Robin Seto, Blase Lee Loy and Brandon Kimura . . . QMC President Fred Pritchard says, "The agreement will assist in Queen's ability to fulfill the mission of Queen Emma in Hawaii to provide medical care for all of Hawaii's people."

Aloha Medical Mission

It was a nightmare come true for Ramon Sy, deep in the Philippine jungle on Negros Island . . . "I was all by myself and when I turned around, I saw literally hundreds of people . . . I thought "Whew!" but I went through it. Everywhere there were ailing people, standing quietly, patiently, almost unable to believe that someone had, at last, come to help them . . ." The 14 doctors and five lay support people, all volunteers from Hawaii, did what they could during their three-week visit, eating on the run, working 18 hours or more, sometimes dropping to sleep on the spot . . . They were unprepared for the constant crush of patients and the depth of the poverty in this first visit to Negros, the poorest area in the Philippines.

Miscellany . . .

What do Eskimo mothers warn their children not to do?

"Don't eat yellow snow. (As told by our 19th hole friend, Walter Loo)

**Any lender can help get your
home improvement project started.**



An AdvanceLineSM can help your home reach its full potential.

You know how home improvement projects go. First, the kitchen, then the bath, then a pool, then landscaping. And each time you find yourself trekking down to a bank for another home improvement loan. Not with an AdvanceLine from First Interstate Bank.

One trip and your AdvanceLine will see you through project after project. Year after year. AdvanceLine is a revolving personal line of credit, much like a super charge card. As you repay, you actually rebuild available credit for future use.

An AdvanceLine can be established right up to \$250,000, depending on how much equity you have and, of course, your ability to repay.

The interest rate is based on the average 91-day Treasury Bill rate during the prior calendar quarter, so you're always paying a fair, current market rate.

But perhaps most important, since your AdvanceLine is secured by home equity, you qualify for full interest expense deductibility under the Tax Reform Act of 1986 and your AdvanceLine is not limited to just home improvement use.

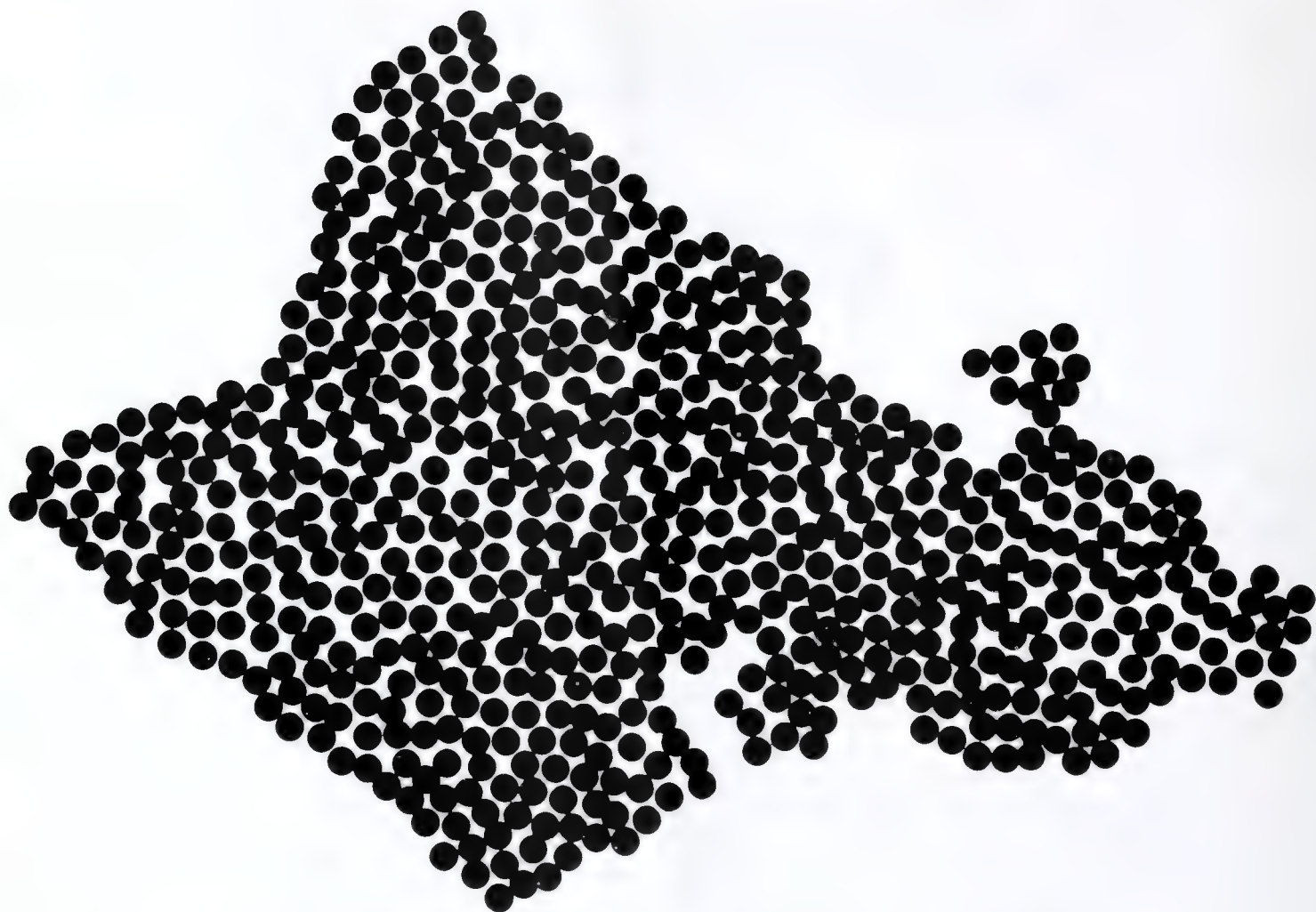
You can use your AdvanceLine for tuition payments, taxes, major purchases, investments or even paying off other, more expensive loans and charges.

For more information about AdvanceLine, stop in at any branch or call the Consumer Loan Center at 525-8290. Let us help you get the full potential out of your home.



An equal housing, equal opportunity lender. Member FDIC.





Only Hawaiian Tel's pager network can reach you at all these points.

We'll get right to the point.

Hawaiian Tel offers the only pager network that provides Island-wide and state-wide coverage.

So you're in touch from Waimea to Waimanalo. Makaha to Makapuu. Haleiwa to Honolulu. And all points in between.

We also offer extensive Neighbor Island and interisland service. Comprehensive warranties on every pager we rent or sell (both tone and digital readout models). Plus, our monthly network service fee works out to less than a dollar a day. That's a small price to pay for constant contact with your business.

To take advantage of all our good points, call 732-9500 on Oahu or 1-800-232-8822 on the Neighbor Islands.

HAWAIIAN TEL GTE

Beyond the call



Over the Editor's Desk

STEPHEN R.P.K. BRADY, MD

NEW TEST IDENTIFIES HIGH CARDIAC RISKS — FULLERTON, CALIFORNIA—Heart disease kills an estimated 2,000 adults daily in the U.S., and some of the victims are already labeled at birth. A new test released by Beckman Instruments, Inc. will bring consumers and their doctors basic knowledge of whether or not they are born with the high cardiac risk potential. The Orange County manufacturer of health care and life sciences products is the first company to market a test kit for measuring levels of Apolipoprotein A-1 and B in the blood, with answers in less than five minutes using nephelometric immunoassay. The test is now available worldwide for hospital, clinical and reference laboratories, and can be requested at physical checkups. Apolipoproteins are proteins that transport fats, including cholesterol in the blood.

High levels of Apolipoprotein B, like high levels of cholesterol, are associated with high risk for coronary artery disease. Likewise, low levels of Apolipoprotein A-1 also place a person at risk for coronary artery disease. New research is indicating that high Apolipoprotein A-1 levels are protective while high levels of Apolipoprotein B are dangerous. Thus, a healthy profile is to have high levels of Apolipoprotein A-1 and low levels of Apolipoprotein B. These new biochemical markers are associated with the disease process, with both severity and extensiveness indicated about five times better than by cholesterol measurements.

DRS. ROBERT BJORNSON, GEORGE BUSSEY, RUSSELL HICKS, AND TERRY SCHULTZ CERTIFIED—Robert Bjornson, MD, George Bussey, MD, Russell Hicks, MD, and Terry Schultz, MD, have passed the certification examination of the American Medical Society on Alcoholism and Other Drug Dependencies (AMSAODD). They are iden-

OH, WHAT RELIEF . . .

Sudden staff illness, planned vacation, excess workload can put strain on your support staff. We can provide relief.

Our staff is specifically trained and suited to adapt quickly and perform in the most demanding situations.

- Available on call 24 hours a day.
- No bonding, insurance, payroll, taxes, benefits to pay.
- Specialists in medical staffing needs.

526-3761



Kahu Malama Nurses, Inc.
680 Ala Moana Blvd., Suite 412
Honolulu, Hawaii 96813
(808) 526-3761

Did you know?

Saint Francis Medical Center is one of the top three hospitals in Hawaii . . . and the fastest growing.

Leaders in quality health care.

Serving people of all faiths, beliefs, or ethnic backgrounds.



Saint Francis Medical Center

Discover the Difference



Why buy a computer system you have to perform surgery on just to use?



Leonard Mednick, CPA

Then why buy a computer system that is incomplete?

AURA Computers are assembled by our professionals as totally complete, turn-key, IBM-compatible systems, and for far less money than the competitions' advertised "specials" which are incomplete.

For Instance:

AURA AT \$2399

1 Megabyte RAM
20 Megabyte Hard Disk
1.2 Megabyte Floppy
360 K Floppy
Color Monitor & Card

AURA XT \$1399

640 K RAM
20 Megabyte Hard Disk
1 360 K Floppy
Monochrome Monitor
& Card

AURA PC \$1099

640 K RAM
2 Ea 360 K Floppys
Monochrome Monitor
& Card

All systems carry a FULL ONE YEAR PARTS & LABOR WARRANTY
(The big guys only offer 90 days!)

PLUS ONE WEEK MONEY BACK GUARANTEE

AND Many more STANDARD FEATURES!!!

Don't buy a system that you have to upgrade just to use.

AURA
COMPUTER CO.

Unbeaten Quality, Price, & Service

A division of Leonard Mednick CPA,
part of the Small Biz Help Net

15th Floor, Pacific Tower / 1001 Bishop Street
Honolulu, Hawaii 96813 / (808) 536-7211, MODEM 533-0190

tified by that society as knowledgeable and expert in chemical dependence. Bjornson is at Maui Memorial Hospital, Bussey is at Kahi Mohala in Leeward Oahu, Hicks at St. Francis and Schultz at Tripler.

Seven-hundred-thirty physicians throughout the country have been certified this year by AMSAODD, the major national and international organization for physicians who treat alcoholism and other drug dependence. Certificates will be presented during the society's annual meeting and scientific conference in Cleveland in April. The 1987 directory of AMSAODD members (currently 2,500) will identify those who are certified.

This is the first year that the innovative examination has been given to AMSAODD members on a national basis in an effort to identify physicians expert in this rapidly expanding field. The second national exam is scheduled for December 5, 1987.

"The field of alcohol and drug dependence treatment is growing rapidly in response to increased awareness of what's considered by many to be a major national medical problem," said Max Schneider MD, president of the Society. "Certification is a way to identify those physicians who, by testing, have shown a mastery of the body of knowledge that has now been amassed in this field."

The five-hour examination covers alcohol and all other drugs of abuse, with questions equally divided between clinical issues and basic science. Recertification will be required every seven years.

OVER 200 SMOKING/NO SMOKING SIGNS FROM WHICH TO SELECT IN NEW CATALOG—In its newest publication, "#207 — Smoking Signs," Litho/Color Inc., Safety Sign Systems, offers an expanded series of signs to enable employers, building engineers, purchasing agents, and administrators to meet new "non-smoking area" demands with eye-catching pictograms in designs, sizes, colors, and wording to fit a variety of needs.

Litho/Color signs feature subsurface graphics on rigid, vandal-resistant vinyl with a strong adhesive backing — easily installed without tools or hardware.

For a free copy of Litho/Color Inc.'s "Smoking" catalog, write Litho/Color Inc., 840 W. Baltimore, Detroit, Mich. 48202, or call (800) 521-2103 toll free.

POCKET-SIZE CARD LISTS ABBREVIATIONS FOR ANTIBIOTICS—A card that folds to the size of a pocket calculator lists antibiotics in ab-



WE'RE
FIGHTING FOR
YOUR LIFE

**American
Heart
Association**



**The Nomura Pacific Basin Fund
Rewards the
Discerning Investor**

74.5%*
in 1986



That's right! In 1986 The Nomura Pacific Basin Fund placed *third* in performance among 1,117 monitored mutual funds** — *second* among international funds.

And, since its inception in July, 1985 the Fund has returned 116.0% to investors.

And now:

- *Minimum initial investment reduced to \$10,000*
- *No sales or redemption charges*
- *Experienced proven professional management*
- *Call (808) 538-3837*
Persons-in-charge
Russell Oki or Sharon Kaya

* Total return for the period January 1, 1986-December 31, 1986, based on change in share price, reinvestment of dividends and capital gains distributions. Favorable currency exchange rates during this period contributed significantly to the total return. Past performance is no guarantee of future results.

** Lipper Analytical Services, Inc., a well known fund rating service.

For more complete information about the Fund, including charges and expenses, call the above number or mail the coupon for a free prospectus. Read it carefully before you invest or send money. Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.



NOMURA SECURITIES INTERNATIONAL, INC.

Honolulu Office: (808) 538-3837

Persons in Charge: Russell Oki & Sharon Kaya

1001 Bishop Street, Pacific Tower, Suite 2760, Honolulu, HI 96813

Name _____

Address _____

City _____ State _____ Zip _____

Business phone () _____ Home phone () _____

Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.

Member SIPC

PBN

leas·able

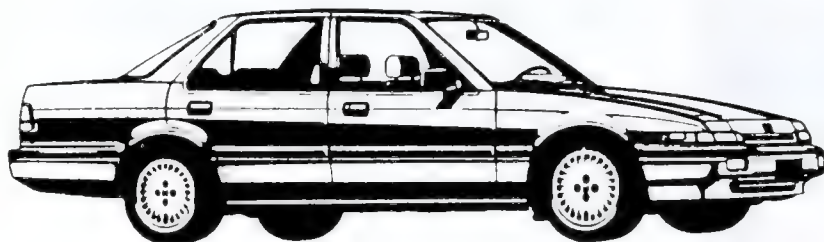
(le-sa-b'l), *adj.*

1. ability to drive more car for less money
2. opportunity to save or invest your down payment instead of putting it into a car
3. ability to benefit from the new tax laws
4. an affordable way to finance a new Honda 4 dr Accord LX with automatic transmission

\$227.00

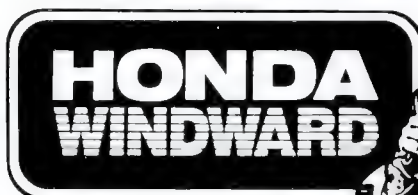
PER MONTH PLUS TAX

Model CA563: 1st payment, security deposit and license fee delivers your car.
60 month closed end lease.

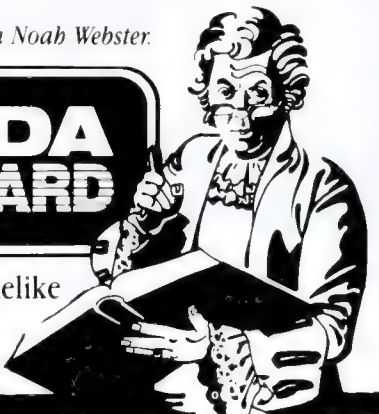


Choose from stock or order one of your choice for the same Monthly Payment.

A Word to the wise from Noah Webster.



in Kaneohe near Likelike
and Kam Highways
Telephone 247-8544



If you do business in Hawaii . . .

and want to keep on top of civil cases in our courts, or tax liens, public hearings, incorporations and partnerships, or almost anything else of value in your practice

. . . we have news for you



For information call 521-0021.

abbreviations designated by the World Health Organization (WHO) for standardization.

The reference card from Beckman Instruments Inc. describes more than 35 antibiotics and their dilutions tested in mcg/mL on the Beckman FOX™ EXTRA Gram Negative, FOX EXTRA Gram Positive, and FOX Fastidious MIC Test Panels. All three panels comply with recommendations by the National Committee for Clinical Laboratory Standards for susceptibility testing as outlined in NCCLS M7-A, 1985.

For your reference card, or more information, contact Beckman Instruments Inc., Micro-Media Systems, 6200 El Camino Real, Carlsbad, Calif. 92008-9990; telephone: (800) 526-3821.

UW SELECTED TO DEVELOP AIDS TRAINING PROGRAM—AIDS is more than a serious physical illness. Most AIDS patients also experience anxiety, depression, and other psychological and social problems. And often, the health professionals involved in caring for AIDS patients are not prepared to deal with this "other side" of the disease.

To combat this deficiency, the National Institute of Mental Health (NIMH) has selected the University of Washington School of Social Work as one of the first centers nationwide to train health care providers in the special requirements of caring for individuals with AIDS and AIDS-related complex, or ARC. (ARC patients are those exposed to the HTLV-III virus who experience some of the symptoms of AIDS without developing the life-threatening diseases associated with the full syndrome.)

"Because AIDS was largely unknown before 1980, few health care professionals have prior training or expertise in treating AIDS patients," said Dr. Lewayne Gilchrist, research associate professor of social work, who is principal investigator for the project.

"In addition to providing updated information on the biomedical aspects of AIDS/ARC, our program will place special emphasis on expanding caregivers' clinical resources and skills in coping with a broad spectrum of other difficult issues that arise in conjunction with this disease," said Dr. Norman Spencer, who will direct the project for the School of Social Work.

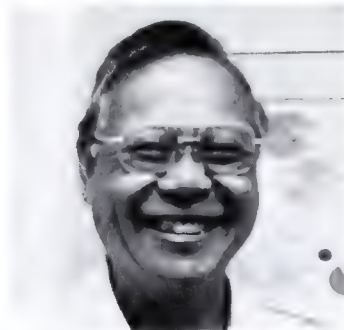
For more information, contact L.G. Blanchard at (206) 543-5101.



Frank E. Ceccarelli, M.D.,
Urology



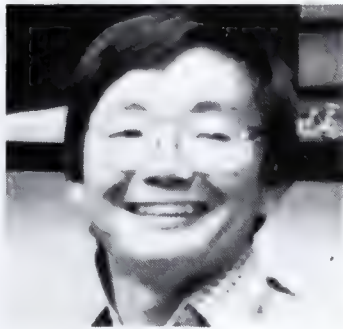
Susan H. Chapman, M.D.,
Obstetrics/Gynecology



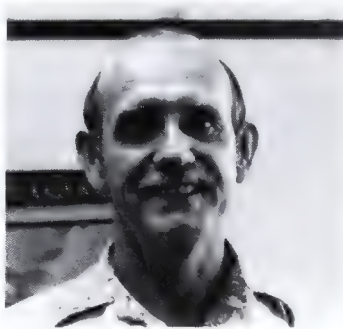
Bernard Fong, M.D.,
Cardiology



Alvin Furuike, M.D.,
Pulmonology



Thomas Y. Ito, M.D.,
Urology



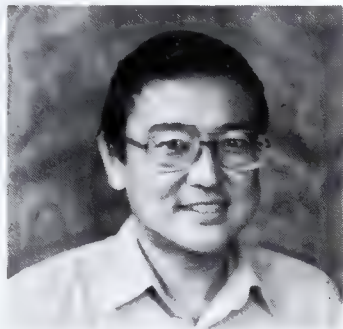
C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



Paul I. Sunahara, M.D.,
Dermatology

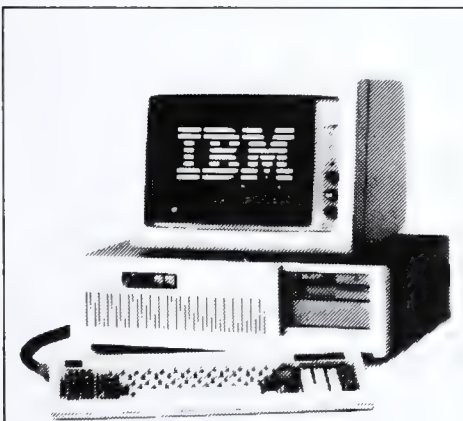


Henry L. Yim, M.D.,
Pediatrics

What do these doctors have in common?

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**



Personal Computer AT is a trademark of
International Business Machines Corporation

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary.



Now that you understand how our
PayAnyDay[®] auto loans work,
 why not ask your dealer for one.

Pick a day, any day.

That's what a First Hawaiian PayAnyDay auto loan lets you do. Every month. So the date you make your payment is left entirely up to you.

No other financial institution offers these PayAnyDay features. So if you're in the market for a car, there's no need to dart from place to place looking for the right loan.

Just insist that your dealer provide First Hawaiian financing.

The rates are very competitive. There's never a prepayment penalty. And a PayAnyDay loan gives you the freedom to control your monthly budget.

Check and see for yourself. Compared to PayAnyDay, other auto loans miss the mark.



FIRST HAWAIIAN BANK

We say yes to you.

Member FDIC



JUNE 1987
VOL. 46, NO. 6

Hawaii MEDICAL JOURNAL

CONTENTS

EDITORIALS: 182

Vitamin E

J.I. Frederick Reppun, MD

Osteoporosis

J.I. Frederick Reppun, MD

Overdoses

Stephen J. Wallach, MD

Lifetime Medical TV

J.I. Frederick Reppun, MD

LETTERS TO THE EDITOR 183

Re: Lifetime Medical Television

Re: Lifetime Channel

FROM THE PRESIDENT 184

Walter W.Y. Chang, MD

FROM THE DIRECTOR OF HEALTH 186

John C. Lewin, MD

THE PHYSICIAN IN SOCIETY — 1987 187

THE RELATIONSHIP BETWEEN AIDS

AND NUCLEAR WAR

J.I. Frederick Reppun, MD

FLYING AND THROMBOCYTOPENIA 191

Robert T.S. Jim, MD

A BRIEF REVIEW OF VITAMIN E 192

M. Kathryn Schaefer

CONTINUING MEDICAL EDUCATION 193

INSTRUCTIONS TO HMJ AUTHORS 194

FLECAINIDE OVERDOSE 197

Sukchai Satta, MD

Douglas M. Rogers, MD

OSTEOPOROSIS: WILL THE USE OF NEW 199

TECHNOLOGY INCREASE OR DECREASE

HEALTH CARE COSTS?

Richard D. Wasnich, MD

Ryan Hagino, BS

Philip D. Ross, PhD

NEWS & NOTES 201

Henry Yokoyama, MD

BOOK REVIEW 204

The Good News About Depression

George D. Bussey, MD

OVER THE EDITOR'S DESK 205

Stephen R.P.K. Brady, MD

Hawaii medical journal
UCSF LIBRARY
Received on: 07-08-87





If you own any commercial vehicles, maybe you shouldn't.

Before you buy another company van, truck or other commercial vehicle, let First Hawaiian Leasing show you the "New Taxwise Alternative."

Here are some of the benefits of the First Hawaiian Leasing alternative under the current tax reform laws:

- At First Hawaiian Leasing, lease payments are fixed at rates which are usually 20% to 25% lower than conventional bank financing.
- Under the new tax laws, leasing can reduce your Alternative Minimum Tax liability.
- There is no down payment — it amounts to 100% financing.
- Lease payments are fully tax deductible if the vehicle is used for business purposes.
- At the end of the lease contract, you have the right to buy the vehicle at a pre-arranged price, if you wish.

Compare leasing, the Taxwise Alternative from First Hawaiian Leasing, before you spend your company's money on another: delivery truck, company car, sightseeing bus, ambulance, armored car, bookmobile, cement truck, taxi, tractor, van, rental car... you get the idea.

For a free, cost-saving comparison, just call 525-7035.



FIRST HAWAIIAN LEASING

A financial services company of First Hawaiian Inc.
We say yes to you, too.

120

100

80

60

40

20

0

130

110

90

70

50

30

10

In mild to moderate hypertension

**THE FIRST
ONCE DAILY**

**CALCIUM
CHANNEL
BLOCKER...**

NEW
ONCE DAILY



ISOPTIN^{SR}*

(verapamil HCl/Knoll)

240 mg scored, sustained-release tablets



JAMES B.
38, black male, heavy smoker. Prescribed a diuretic by another physician last year for hypertension.

YOUR CONCERNS
Presents with "smoker's cough." Workup reveals a BP of 150/107.

A LOGICAL CHOICE FOR CONTROL OF HIS BP
ISOPTIN[®] (verapamil HCl/Knoll) because...
— Black hypertensives often have low plasma renin activity and generally do not respond favorably to beta blockers.
— Beta blockers may increase the likelihood of bronchospasm.

ALICE W.
65, diabetic, overweight. Her BP has elevated to 190/98.

YOUR CONCERNS
She's on daily insulin.

A LOGICAL CHOICE FOR CONTROL OF HER BP
ISOPTIN[®] (verapamil HCl/Knoll) because...
— Unlike most beta blockers and diuretics, ISOPTIN has no adverse effects on serum glucose levels.
— Unlike most beta blockers, ISOPTIN does not mask the symptoms of hypoglycemia.



THOMAS G.
70, asthmatic. In the past, BP adequately controlled with 25 mg hydrochlorothiazide daily.

YOUR CONCERNS
Today patient presents with symptoms of gout. Workup reveals high uric acid level, low serum potassium, and BP elevated to 180/98.

A LOGICAL CHOICE FOR CONTROL OF HIS BP
ISOPTIN[®] (verapamil HCl/Knoll) because...
— Unlike diuretics, ISOPTIN will not decrease serum potassium levels or elevate uric acid levels.
— Unlike beta blockers, ISOPTIN can be used safely in asthma and COPD patients.

JOHN K.
42, Annual physical uncovered diastolic BP of 102... confirmed on three successive office visits. Unresponsive to nonpharmacologic intervention.

YOUR CONCERNS
Salesman, spends many hours of his working day in car... total cholesterol level 300, HDL 35.

A LOGICAL CHOICE FOR CONTROL OF HIS BP
ISOPTIN[®] (verapamil HCl/Knoll) because...
— Unlike diuretics, ISOPTIN does not cause urinary urgency.
— Unlike either beta blockers or diuretics, ISOPTIN will not adversely affect his already seriously compromised lipid profile.
— Unlike with propranolol, fatigue and impotence are rarely reported.



**Antihypertensive therapy you
and your patients can live with**

*A product of Knoll research.

© 1986, BASF K & F Corporation

2538/2-87

Knoll Pharmaceuticals
A Unit of BASF K&F Corporation
Whippany, New Jersey 07981

BASF Group



Printed in U.S.A.
Please see adjacent page for brief summary.

In mild to moderate hypertension
THE FIRST ONCE DAILY
CALCIUM CHANNEL BLOCKER

Brief Summary

ISOPTIN® SR
(verapamil HCl/Knoll)
240 mg scored, sustained-release tablets

CONTRAINDICATIONS: 1) Severe left ventricular dysfunction (see WARNINGS), 2) Hypotension (less than 90 mmHg systolic pressure) or cardiogenic shock, 3) Sick sinus syndrome or 2nd or 3rd degree AV block (except in patients with a functioning artificial ventricular pacemaker).

WARNINGS: Heart Failure: ISOPTIN should be avoided in patients with severe left ventricular dysfunction (see DRUG INTERACTIONS). Patients with milder ventricular dysfunction should, if possible, be controlled before verapamil treatment. Hypotension: ISOPTIN (verapamil HCl) may produce occasional symptomatic hypotension. Elevated Liver Enzymes: Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Periodic monitoring of liver function in patients receiving verapamil is therefore prudent. Accessory Bypass Tract (Wolff-Parkinson-White): Patients with paroxysmal and/or chronic atrial flutter or atrial fibrillation and a coexisting accessory AV pathway have developed increased antegrade conduction across the accessory pathway producing a very rapid ventricular response or ventricular fibrillation after receiving intravenous verapamil. While this has not been reported with oral verapamil, it should be considered a potential risk. Treatment is usually D.C.-cardioversion. Atrioventricular Block: The effect of verapamil on AV conduction and the SA node may cause asymptomatic 1st degree AV block and transient bradycardia. Higher degrees of AV block, while infrequent (0.8%), may require a reduction in dosage or, in rare instances, discontinuation of verapamil HCl. Patients with Hypertrophic Cardiomyopathy (IHSS): Although verapamil has been used in the therapy of patients with IHSS, severe cardiovascular decompensation and death have been noted in this patient population.

PRECAUTIONS: Impaired Hepatic or Renal Function: Verapamil is highly metabolized by the liver with about 70% of an administered dose excreted in the urine. In patients with impaired hepatic or renal function verapamil should be administered cautiously and the patients monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacological effects (see OVERDOSAGE).

Drug Interactions: Beta Blockers: Concomitant use of ISOPTIN and oral beta-adrenergic blocking agents may be beneficial in certain patients with chronic stable angina or hypertension, but available information is not sufficient to predict with confidence the effects of concurrent treatment in patients with left ventricular dysfunction or cardiac conduction abnormalities. Digitalis: Clinical use of verapamil in digitalized patients has shown the combination to be well tolerated if digoxin doses are properly adjusted. However, chronic verapamil treatment increases serum digoxin levels by 50 to 75% during the first week of therapy and this can result in digitalis toxicity. Upon discontinuation of ISOPTIN (verapamil HCl), the patient should be reassessed to avoid underdigitalization. Antihypertensive Agents: Verapamil administered concomitantly with oral antihypertensive agents (e.g., vasodilators, angiotensin-converting enzyme inhibitors, diuretics, beta blockers, prazosin) will usually have an additive effect on lowering blood pressure. Patients receiving these combinations should be appropriately monitored. Disopyramide: Disopyramide should not be administered within 48 hours before or 24 hours after verapamil administration. Quinidine: In patients with hypertrophic cardiomyopathy (IHSS), concomitant use of verapamil and quinidine resulted in significant hypotension. There has been a report of increased quinidine levels during verapamil therapy. Nitrates: The pharmacologic profile of verapamil and nitrates as well as clinical experience suggest beneficial interactions. Cimetidine: Two clinical trials have shown a lack of significant verapamil interaction with cimetidine. A third study showed cimetidine reduced verapamil clearance and increased elimination to 1/2. Anesthetic Agents: Verapamil may potentiate the activity of neuromuscular blocking agents and inhalation anesthetics. Carbamazepine: Verapamil may increase carbamazepine concentrations during combined therapy. Rifampin: Therapy with rifampin may markedly reduce oral verapamil bioavailability. Lithium: Verapamil may lower lithium levels in patient on chronic oral lithium therapy. Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no evidence of a carcinogenic potential of verapamil administered to rats for two years. Verapamil was not mutagenic in the Ames test. Studies in female rats did not show impaired fertility. Effects on male fertility have not been determined. Pregnancy (Category C): There are no adequate and well-controlled studies in pregnant women. ISOPTIN crosses the placental barrier and can be detected in umbilical vein blood at delivery. This drug should be used during pregnancy, labor, and delivery, only if clearly needed. Nursing Mothers: ISOPTIN is excreted in human milk, therefore, nursing should be discontinued while verapamil is administered. Pediatric Use: Safety and efficacy of ISOPTIN in children below the age of 18 years have not been established.

ADVERSE REACTIONS: Constipation 8.4%, dizziness 3.5%, nausea 2.7%, hypotension 2.5%, edema 2.1%, headache 1.9%, CHF/pulmonary edema 1.8%, fatigue 1.7%, bradycardia 1.4%, 3° AV block 0.8%, flushing 0.1%, elevated liver enzymes (see WARNINGS). The following reactions, reported in less than 1.0% of patients, occurred under conditions (open trials, marketing experience) where a causal relationship is uncertain; they are mentioned to alert the physician to a possible relationship: angina pectoris, arthralgia and rash, AV block, blurred vision, cerebrovascular accident, chest pain, claudication, confusion, diarrhea, dry mouth, dyspnea, ecchymosis or bruising, equilibrium disorders, exanthema, gastrointestinal distress, gingival hyperplasia, gynecomastia, hair loss, hyperkeratosis, impotence, increased urination, insomnia, macules, muscle cramps, myocardial infarction, palpitations, paresthesia, psychotic symptoms, purpura (vasculitis), shakiness, somnolence, spotty menstruation, sweating, syncope, urticaria. Treatment of Acute Cardiovascular Adverse Reactions: Whenever severe hypotension or complete AV block occur following oral administration of verapamil, the appropriate emergency measures should be applied immediately, e.g., intravenously administered isoproterenol HCl, levarterenol bitartrate, atropine (all in the usual doses), or calcium gluconate (10% solution). If further support is necessary, inotropic agents (dopamine or dobutamine) may be administered. Actual treatment and dosage should depend on the severity and the clinical situation and the judgment and experience of the treating physician.

OVERDOSAGE: Treatment of overdosage should be supportive. Beta-adrenergic stimulation or parenteral administration of calcium solutions may increase calcium ion flux across the slow channel, and have been used effectively in treatment of deliberate overdosage with verapamil. Clinically significant hypotensive reactions or fixed high degree AV block should be treated with vasopressor agents or cardiac pacing, respectively. Asystole should be handled by the usual measures including cardiopulmonary resuscitation.

Knoll Pharmaceuticals
 A Unit of BASF K&F Corporation
 Whippany, New Jersey 07981



BASF Group

©1986, BASF K&F Corporation

2474/11/86

Printed in U.S.A.

Hawaii Medical Journal

(USPS 237-640)

Published Monthly for the
HAWAII MEDICAL ASSOCIATION
 (Incorporated in 1856 under the Monarchy)
320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD
Founding Editor: HARRY L. ARNOLD JR., MD
News Editor: HENRY N. YOKOYAMA, MD
Assistant Editor and Book Review Editor:
 DOUGLAS G. MASSEY, MD
Contributing Editors: STEPHEN R.P.K. BRADY, MD,
 FRANCIS H. FUKUNAGA, MD,
 CHARLES S. JUDD, JR., MD,
Managing Editor: CHARLOTTE BEAL
Editorial Assistants: BECKY KENDRO,
 JUDI KINGREY
Copy Editor: GWENDOLYN CHANG HULLEMAN
Graphic Artist: J. CHARLES DAVIS
Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,
 THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,
 JAMES LUMENG, MD, FRANCIS D. PIEN, MD
Publications Committee: CHARLOTTE M. FLORINE, MD
 (Commissioner)
 HENRY N. YOKOYAMA, MD
 (Chairman)
 STEPHEN R.P.K. BRADY, MD,
 NATHANIEL P.H. CHING, MD,
 FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,
 JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,
 JAMES P. MCGUIRE, MD,
 DAMKERNG PATHOMVANICH, MD,
 ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,
 J.I. FREDERICK REPPUN, MD,
 TERRY C.Y. WONG, MD,
 SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD
President-Elect: JAMES LUMENG, MD
Past President: RUSSELL T. STODD, MD
Secretary: JOHN H.C. KIM, MD
Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD
Honolulu: JOHN T. McDONNELL, MD
Kauai: THOMAS GROLLMAN, MD
Maui: HELEN S. PERCY, MD
West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD
 CALVIN C.M. KAM, MD
Alternate Delegates to AMA
 WALTER W.Y. CHANG, MD
 RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.
 Post Office Box 833
 Honolulu, Hawaii 96808
 Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.
 16 Bruce Park Avenue
 Greenwich, Connecticut 06830
 Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.



Vitamin E

In this issue of the JOURNAL is a short paper on Vitamin E as an updated review by a fourth-year UH School of Medicine student who is to graduate this year. She is Kathy Schaefer.

We encourage the "learning" physicians-of-the-future to submit papers to the JOURNAL for consideration — students and residents both.

This paper, we think, is well-written, concise, and it should be of interest to all practicing physicians. It has the personal touch that is missing in a Med-line search!

J.I. Frederick Reppun, MD
Editor

Osteoporosis

Richard Wasnich, at Kuakini, in his article on osteoporosis in this issue of the JOURNAL, makes a strong plea for preventing osteoporosis in aging women by treating them prophylactically on a case-by-case basis.

The use of hormones, however, is a controversial issue, particularly in the case of estrogens alone. Many gynecologists recommend cyclical progestins as well. Since women all enter and pass through menopause, teleology is thwarted by treatment with hormones.

We happen to believe that THE main contributor to osteoporosis is lack of muscular activity. The bone says: "If you muscles don't need me to support your flabbiness, why should I remain strong?"

Hopefully, Dick's article will generate responses from readers of the JOURNAL.

J.I. Frederick Reppun, MD
Editor

Overdoses

Overdoses are extremely common. Presently suicide is the fifth or sixth leading cause of death. In the younger age groups, this figure may be the second or third leading cause of death. All overdoses should be regarded as potentially severe and possibly fatal. We must be the medical detective, looking for clues in patients who cannot respond or do not want to respond. We have to be exquisitely sensitive in making our diagnosis, looking at pupils, smelling breaths, searching for occult trauma.

The comatose patient should be given glucose and narcotic antagonists. The cause of death in the overdosed patient is cardiac or respiratory decompensation and these two entities should be tended to immediately. Patients who take an overdose should be monitored as closely as possible; many, if not most, need intensive care. It is of utmost importance that these patients undergo a psychiatric examination when awake and be



Once upon a time, this was considered a luxury.

If you're a busy executive, cellular phone service from Hawaiian Tel is no longer a luxury. It's a necessity.

Cellular is the most important business communications breakthrough since the advent of the telephone itself. It lets you make and receive calls from almost anywhere. So while others are on the road, you can be on the phone.

Besides the obvious business advantages, cellular service from Hawaiian Tel is backed by 104 years of local knowledge, and the nationwide cellular expertise of GTE Mobilnet.

medically stable before they are sent out of the hospital.

I have heard statements in emergency rooms which, in referring to the patient, can be paraphrased, "Oh why doesn't he do it right." There is no place for this type of behavior among emergency room personnel or others. Some patients have been discharged, only to go out and "do it right." Many people have a time in their lives when they are deeply troubled and once the crisis is over attitudes can change.

Antiarrhythmics* are potent drugs. The newer medications are even more potent, and can be lethal if not taken properly. There are many cardiologists and electrophysiologists who feel that people with sustained ventricular tachycardia and those who are symptomatic should be the ONLY ones treated. Most of us, however, are more liberal with our criteria. I think we have to be extremely cautious in the elderly with occasional and even frequent VPCs, those who are asymptomatic and whose RPC, are discovered incidentally.

Stephen J. Wallach, MD
Guest Editor

* See Dr. Satta's article on page 197

Lifetime Medical TV

In the February '87 issue of the JOURNAL we ran a complaint in the Letters-to-the-Editor column on page 48 by Hawaii Medical Association member Alex Roth, who was quite disappointed that local Oceanic Cablevision had discontinued airing "Lifetime Medical Television." This is a program geared to

(Continued on page 209)



Re: Lifetime Medical Television

I'm writing to ask for your help in reinstating access to an important medical information resource which was removed from the cable system serving your community.

As you know, LIFETIME MEDICAL TELEVISION provides 26 hours each week of television programs especially for physicians. These programs are prepared in collaboration with the American Medical Association and 10 other medical specialty societies, and are brought to you as part of your basic cable service. Our programs have been very highly valued by physician viewers — almost 150,000 physicians now watch these programs each month, and our audience has been growing steadily.

Recently, Oceanic Cablevision, the cable television provider which distributed our programs in your area, has decided to stop providing LIFETIME, believing that other entertainment-

(Continued on page 210)



So was this.

So if effective communication is important to your company, dial 732-9500 and ask about cellular phone service from Hawaiian Tel. It's everything your business could call for.

HAWAIIAN TEL **GTE**
Beyond the call



An authorized agent of
Mobilnet®
Cellular Communications





FROM THE PRESIDENT

AIDS! HTLV-III! HIV!

These three acronyms for the same entity conjure up the spectre of this century's most potentially devastating "Modern Plague." We all are familiar with the medical aspects of this pestilence, but the socioeconomic aspects and impact are only now being realized. Over 35 separate bills dealing with AIDS were introduced in this year's State Legislature. These cover informed consent, mandatory testing, discrimination and education.

Recently, concern about heterosexual spread, about donating to the Blood Bank as well as testing those who received blood transfusions between 1978 to 1985, has also been raised. The U.S. Surgeon General has emphasized the need for education

and even condom usage when necessary. It needs to be emphasized that blood donors are NOT at risk.

Your Association, through the efforts of the HMA's Communicable Disease Committee, has been active in this respect. It is hoped that the HMA will be able to stay in the forefront and work closely with all agencies involved — Department of Health, Department of Education, Blood Bank of Hawaii, University of Hawaii and others to ensure public safety and health. As Dr. John Lewin, Department of Health director, stated: "We need to emphasize the positive aspects and stress the importance of a stable, monogamous relationship."

Walter W.Y. Chang, MD
President
Hawaii Medical Association

FLEXIBLE & DEPENDABLE



The Doctor's Stethoscope. Probably the most flexible and dependable instrument you currently own. Like the stethoscope, your computer system should also be both flexible and dependable. When you choose a computer system from **CompuPro**, that's exactly what you get.

Flexible

A computer must be flexible to be effective. Flexible enough to grow as your practice grows. Flexible enough to choose the medical office management software that best suits your practice. Flexible enough to change as technology changes, so your investment is protected. Flexible enough to offer the performance you need at a price you can afford. Flexible enough to accommodate from 4 to 14 users.



CompuProTM



MICRODYNE
COMPUTER SYSTEMS, INC.

Flexible enough to expand through networking. Flexible enough to incorporate your existing PCs. Flexible enough to offer you all this, and more.

Choose a multi-user system from CompuPro and rest assured that you won't ever be locked in by software or technology.

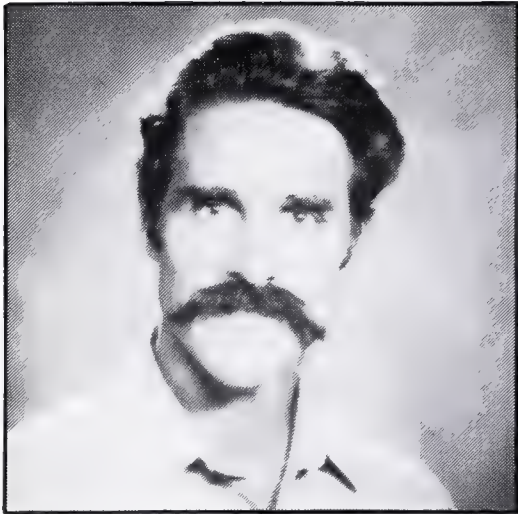
Dependable

A computer system must also be dependable to be effective. **CompuPro** multi-user systems enjoy an enviable reputation for being the most dependable systems you can buy. They just keep right on working, and that lets you keep right on working. Your computer system should help you with your patients, not become one itself! A dependable system doesn't end with rock-solid hardware. There must be a rock-solid organization behind it with a continuing commitment to quality. One that will be there tomorrow. **CompuPro** has been in business since 1973 and has delivered thousands of multi-user systems, most of which are still in constant use today. And in the unlikely event you'll ever need it, prompt on-site service is available nationwide through **Sperry (UNISYS) CUSTOMCARESM**.

Choose a multi-user system from CompuPro and rest assured that your system and your practice will keep right on running smoothly, year after year after year.

524-1740

677 Ala Moana Blvd., Suite 411
Honolulu, HI 96813



FROM THE DIRECTOR OF HEALTH

I am most pleased by the legislative efforts that I have witnessed on the part of Hawaii Medical Association, as conducted by Dr. Richard Lundborg, Ms. Becky Kendro and the Legislative Committee and staff. Not only are these people always present at the appropriate hearings and the giving of testimony, but thus far, despite the hectic process by which these bills are processed and hearings are scheduled, these dedicated individuals have attempted to work with our staff to provide coordinated testimony whenever possible.

Because the influence of individual community members and citizens is so great in terms of influencing specific legislators, I hope to see more and more physicians coming to hearings, and to know that more and more physicians are involving themselves in providing input to their legislative representatives so that we

physicians have a stronger voice in the Legislature.

Next year, when I believe there will be more interest in reviving the tort reform issues, we will need to have a united and well-orchestrated approach. Our ability to improve peer-review processes and our commitment to professional self-regulation will assist us in developing a better tort reform support system.

I look forward to working with the various county medical societies and committees of the Hawaii Medical Association to bring about these kinds of efforts. Again, congratulations to the HMA staff you have representing you, and I look forward to *more* participants next year in our testimony sessions.

John C. Lewin, MD
Director of Health

"I just put more time in my day."

If you're like me, time is your most precious commodity. And you probably spend 110% of it trying to be in three places at once.

"With a Honolulu Cellular Telephone, I can take the features and convenience of an office phone wherever I go. For a lot less than you might think."

"Now I can organize all my activities while I'm on the road. Talk with the press. Coordinate meetings. Even put together a bed race. And have more time to go the extra mile."

CAROLE KAI, Founder,
The Carole Kai International Bed Race

Honolulu Cellular Telephone Company

Hawaii's choice for quality cellular service
1161 Kapiolani Boulevard, Honolulu, Hawaii 96814 515-4765

ERICSSON

The Physician in Society — 1987: The Relationship Between AIDS and NUCLEAR WAR*

The recent unique and momentous conference held on the island of Kauai at Poipu — *Epidemics, Pandemics and Mass Hysteria* (E P & M H) — is a good base from which to address the subject of The Physician in Society.

It is a foundation upon which I can build a temple, a Hawaiian Heiau. Not a commoner's house. Not a house sheltering the Alii, but a temple — a church — that holds man's aspirations, that converts a plain roof into one with a gable and spire that reaches up toward the supernatural Being above.

It was a remarkable event, was E P and M H. The conference was one that may never be surpassed in its excellence, in the future, and perhaps never even equalled.

Some would say that it was the lustre of its faculty that made it so: Sabin, Downs, Volberding, Risse, Stannard, Blaisdell, Anwe Skinsnes Law, June Osborn, Hansen — to name only some — and especially Terence Knapp the actor, known consequently as the resurrected Father Damien, the leper priest of Molokai.

Sabin . . . 60 years a virologist, of oral polio vaccine fame, **Downs** . . . also a longtime hunter and tracker of viruses, **Volberding** . . . Chief of the AIDS Division of San Francisco General Hospital; the man who knows all there is to know about AIDS, **Risse** . . . eminent medical historian, **Stannard, Blaisdell & Law** . . . all local scholars, **Osborn** . . . articulate, knowledgeable and humanistic Dean of Public Health at the University of Michigan, a virologist and pediatrician, **Hansen** . . . an admitted gay physician and Coordinator of Humanities at NYSM, **Knapp** . . . who brought it all together by his performance of a memorable evening, crystallizing the spirit of the self-sacrificing, human-loving priest who gave of his whole self — his nevertheless rebellious and angry self — to minister to his horribly afflicted and loathsome charges at Kalaupapa, because they were human beings like himself.

It was also the lustre of the organizing committee composed of medics and lay people together, Dave Elpern the sparkplug, that made the conference the success that it was; all facets of the community worked together to put on a medical conference — doctors and their patients sharing the decision-making, as is the modern way in health care.

We came together to form a microcosm of the society of man on planet Earth. Nationalities, ethnic groups, people of differing life-styles, men and women, leaders and us commoners put aside our several individual interests and reached out to each other. We also reached out to those "others" — the bigots, the ignorant, the ogres, the evil ones, the pariahs, the ones we variously dub "the opposition" or "the enemy." We broke down all barriers of thought and action, and for four days became a global society in the small.

Have I said anything yet about a nuclear war? No. But I will.

E P and M H had a subtitle after the colon: *From Antiquity to AIDS*. That was because the thrust of the conference was NOT TO IGNORE THE LESSONS OF HISTORY AS WE ARE CONFRONTED WITH THE THREATENING EPIDEMIC OF AIDS. The very same thing can be said of the threat of a nuclear war that is waiting, like a sword hanging over our heads, to drop and annihilate the human race, and perhaps all life on this planet. What AIDS and nuclear war have in common is that threat. In both instances, annihilation may be just as slow, painful and inevitable, just as destructive of the human gene pool. In both instances, the remedy may lie ONLY in prevention.

Guenter Risse gave us at the Conference the results of his historical research into the epidemic of plague in Rome in 1656. The authorities recognized its implications quickly and acted accordingly with alacrity. The methods were harsh and inhumane, by our modern standards of ethics. The "public health" approach was to enforce reporting, screening and strict isolation with total disregard for "civil rights" (there were none then!). The rat flea as a vector was unknown and unsuspected. The etiology was assumed to be evil humors and vapors, the result of sin, filth, poverty and "the others": Immigrants and foreigners. The focus of isolation meant the hangings and executions by death squads of those who tried desperately to visit their loved ones in the pest houses — the lazarettos — or of those who tried to escape. Burning of all belongings and even of homes, together with fumigation by burning sulfur, was the tactic, enforced by the military called in to help the police. It was a successful ploy, as it turned out, although the epidemic ran its natural course to peak and subsequent decline from July to February as the rat flea population followed the same curve on the basis of climatic conditions. The human reaction was one of fear of contagion, of panic and of irrational behavior with increased loss of life and disruption of life-style.

In 1817, during the cholera epidemic in India, the experience and the reactions were quite similar.

In 1832 in New York City, plague was managed in much the same fashion by the authorities — different only in that the latter denied the threat at first and allowed mass evacuations from the city. So far, little had been learned from history.

Even in modern times, in 1916 in Brooklyn, when an epidemic of polio broke out, the reaction by human beings was much the same: Screening, reporting, isolating, fumigating. Fear, panic, evacuation by those who considered themselves not infected, and then blame. It was always the poor, the "dirty," the minorities & the immigrants who were to blame — "the others."

Still no thought of "civil rights" but perhaps a bit more thought of "human rights." The societies of man were still primarily concerned with isolating and containing threatening events, sacrificing individuals in the process. Fear engendered panic. Irrational behavior overwhelmed reason. 300 years had passed without any signs of rationality being manifest. In the notorious Boston Coconut Grove fire of the 1950s, 500 people died, most of them NOT the result of burns, but of panic; with three or four exits available, they all tried to get out one exit!

Risse and the other historians who reviewed epidemics of diseases of the past reminded us that "the enemy" is already being created here and now in this day of AIDS and the threat of nuclear war. It is the societal attitude of "them" versus "us," the finger pointing at Homos, Blacks, Jews, the Russians or "those damn peace activists."

Remember Pearl Harbor and what happened afterwards? The incarceration of Japanese-Americans was a panic reaction that may have been irrational but was a common trait of human beings under threat of war. Still, one cannot blame the authorities of those times, ancient or recent. At *that* time, under *those* circumstances, they did what was generally acceptable as the best thing to do. Monday-morning quarterbacks are always right, as they look down the barrel of the retrospectoscope, but . . . "was you dere, Charlie?" Paying what might be considered blackmail in reverse, retrospectively, is morally wrong. Nevertheless, one generation may apologize for the wrongs perpetrated by a previous one — in words, but not in dollars.

John Wolf, dermatologist and also a historian, reminded the audience, most of whom must have been under age 60, that syphilis was a scourge, a sexually transmitted disease, more than 40 years ago, with an incidence in 1945 of 106,500 cases a year, a pandemic since the discovery of the Americas in 1492. Purely as an incidental finding of basic research, Fleming discovered penicillin, but its value in the treatment of infections was not realized until several years later — a beautiful example of the value of basic research purely for its own sake, something that is sadly hampered nowadays as a result of Star Wars, as I will mention again later. The case load of lues dropped to 6,500 in 1955 as a direct result of the efficaciousness of penicillin, but it has again risen to 50,000 and continues to rise, despite increasing efforts to eradicate it. This hiatus of time between its discovery and its application may indicate something meaningful to us in terms of AIDS: "We may be on the wrong track," except that the present sophistication of the virology laboratories and scientists is not likely to fail us. Albert Sabin made a big issue of the possibility that AIDS too may wax and wane as an epidemic.

Downs, by analogy with other viral epidemics, the vast knowledge of which fills his active cerebrum, pointed out that AIDS provides us with an excellent laboratory experiment for a study of its epidemiology and the study of society's reaction to its revealed presence. Volberding and Osborn indicated that, for once, we scientists are more than ready to deal with this new epidemic, in the virology labs, in the public health arena, in the health care milieu. The big question is whether we moderns have finally learned enough from history to be able to avoid prior mistakes and to develop new techniques in coping with fear, panic and irrational behavior, in the face of seemingly certain 100% mortality with which AIDS presents itself to us. The "us" now encompasses everyone, not only those of us in the health care field. The span of the faculty and of the audience — a CT-scan of the Conference — revealed that fact to all who thought about it.

On the other hand, this society does *not* seem to be able to come to terms, as yet, with the terrible and inevitable medical

consequences of a nuclear war. The evidence for that broad statement is there for all to see who would look: The power-hungry leaders and their nations keep on playing around with nuclear weapons, and other military hardware, as if they were toys for a child. At the same time, the people in general practice denial, are either apathetic or fatalistic, or believe in the second coming of Christ, *after* Armageddon!

The analogy with the public attitude towards AIDS — sex as usual, and more of it — strikes us again. Many in the public sector, who either are or choose to be ignorant, think that AIDS is a scourge from God, that it will strike down only the bad and the ugly, the poor and the dirty, those "others" again. Surely it will never affect us good, clean, godly, affluent, white citizens!

There was a morning of the conference — the whole day, in fact, counting Terence Knapp's rendering of "Damien" that evening — that focused on the native Hawaiians and their history. The epidemics and pandemics hit the "noble savage" on contact with Western civilization at and after Captain Cook's "discovery" of the Islands. The telling of this — by Stannard, Blaisdell and Skinsnes Law — pictured for us all most vividly the decimation and destruction of a race, as a result of diseases. The impact of these was sudden and overwhelming. The Polynesian bodies, stalwart, clear-skinned and healthy; their progeny numerous and surviving well, had no time in which to develop immunities to Western diseases before they were cut down by death from an initial estimated 800,000 population, to a mere 40,000 at the time the Hawaiian monarchy was overthrown by a revolution about 150 years later. As a Kamaaina of 67 years in these islands, I was forcibly struck by the revelation that a race, dying out, its leaders nearly all dead of measles, for example, could not possibly have resisted against a vigorous and determined force that took over the reins of the kingdom, no matter how small that force. That ethnic race in pure form has never recovered, but its blood has infiltrated, by intermarriage, into a steadily growing number of "locals" of mixed ethnic origin. There is even a new resurgence of ethnic self-determinism, although the actual number of pure Hawaiians is perhaps down to 8,000 all told, many of whom decry this new "non-Aloha." When Professor of Medicine at UHSM Kekuni Blaisdell brought all those in the audience who had as much as a trace of Hawaiian blood in them up before the podium — all 13 of them — in the spirit of togetherness with the audience, with Aloha to all, the audience responded in kind and from the heart.

Albert Sabin the wise, the arbiter elegantiarum, then reminded everyone that ethnic self-determinism, although culturally valuable per se, was not what the world needs at this point, namely a confrontation between whites, blacks, browns and yellows. "What the world needs is an emulation of America as a political experiment that has succeeded," he shouted into the microphone. "America, anymore, except for the remaining Redmen, has no single ethnic stock; it is an amalgamation of many races and cultures. The whole world needs to come together and form a greater "America," wherein all nations forego their own particular national goals and fences, and join together into a federation of all mankind — one world." (Hurrah for Albert, I said to myself. He is obviously one of us in PSR & IPPNW. Collaboration, NOT confrontation!)

Typical as it was of human meetings, be they of Little League or of hi-brow doctors, up popped a discordant note that hurt with the sharp prick of a hypo needle. Was the needle sterile, or was it deliberately contaminated with HIV?

The small but bitter explosion put forth by a single member of the audience, who spoke of Hawaiians not wanting to be

(Continued on page 213)



Frank E. Ceccarelli, M.D.,
Urology



Susan H. Chapman, M.D.,
Obstetrics/Gynecology



Bernard Fong, M.D.
Cardiology



Alvin Furuike, M.D.,
Pulmonology



Thomas Y. Ito, M.D.,
Urology



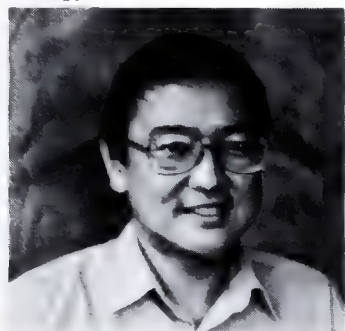
C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



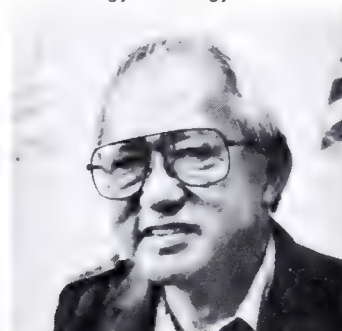
James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



Paul I. Sunahara, M.D.,
Dermatology

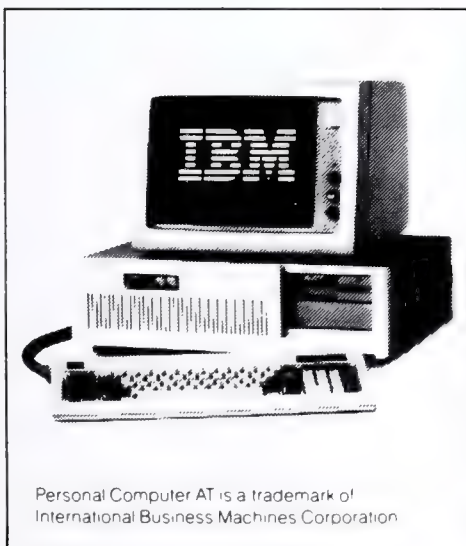


Henry L. Yim, M.D.,
Pediatrics

What do these doctors have in common?

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**



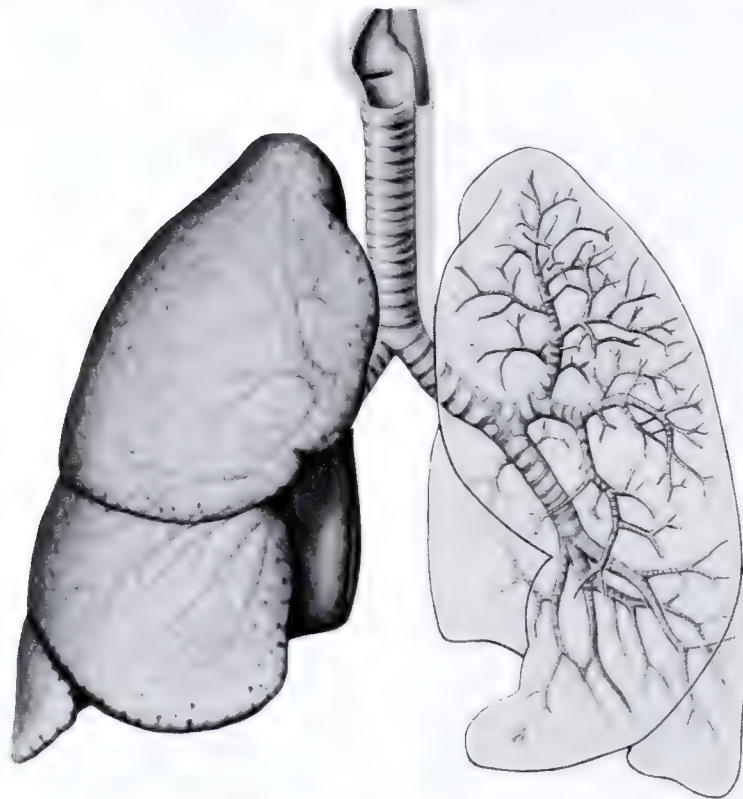
Personal Computer AT is a trademark of
International Business Machines Corporation

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary

Consider the causative organisms...



Ceclor[®]
cefactor

250-mg Pulvules[®] t.i.d.

**offers effectiveness against
the major causes of bacterial bronchitis**

Haemophilus influenzae, Streptococcus pneumoniae
(ampicillin-susceptible and ampicillin-resistant)

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor[®] (cefactor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β -hemolytic streptococci)

Contraindication:
Known allergy to cephalosporins

Warnings:
CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of non-susceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

- Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%.

- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertension, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistix[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

[072886R]
PA 8794 AMP

©1987, ELI LILLY AND COMPANY



700241

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

Flying and Thrombocytopenia

Robert T.S. Jim, MD*

More and more patients with medical illnesses are flying commercial airlines. Except for first-aid kits, basic medical equipment is not available on commercial airlines, (incidentally, virtually every flight has a physician travel on board).¹ Over the years the question of safety and whether to allow patients with thrombocytopenia to fly or not has come up many times. Local hematologists queried on this problem have had no experience with it.²

No studies are available in the medical literature on the risk of bleeding from thrombocytopenia during commercial airline flying. Because of the lack of data and experience on this question, we present here case reports of three patients who, against medical advice, surreptitiously flew between Hawaii and the Mainland United States, without adverse clinical bleeding.

Case 1

A 50-year-old Japanese housewife with chronic idiopathic thrombocytopenic purpura (ITP) since 1970, when she had her spleen removed, recently flew to Lake Tahoe from Hawaii with a platelet count of 20,000 per cubic milliliter; she returned a week later with a platelet count of 15,000 per cubic milliliter. She was on prednisone 100 mg a day orally before, during and after both flights. No clinical bleeding occurred.

Case 2

A 77-year-old Caucasian male with acute myeloid leukemia and platelet count of 28,000 per cubic milliliter, flew to Florida from Hawaii, without any incidents of clinical bleeding.

Case 3

A 41-year-old Caucasian male with chronic ITP since November 1984 and on no medications, recently flew to Los Angeles and returned to Hawaii with platelet counts of 20,000 per cubic milliliter before and after his flights. He had no clinical bleeding episodes during those flights.

Discussion

No data or guidelines are available to clinicians on thrombocytopenia in relation to commercial airline flying. Nor is there a determinant as to the "safe" level of platelets when flying. In this report, three patients with thrombocytopenia in the 15,000-20,000 per cubic milliliter range who were advised not to fly, made five airline flights between Hawaii and the Mainland without any untoward clinical bleeding during or after the flights.

If cabin atmospheric pressures are normalized at high altitudes, bleeding should theoretically not be a problem, although during ascent and descent pressure differences in the ear may result in bleeding in normal people. It would appear from these three cases that one can fly with thrombocytopenia of moderate severity and not have clinical bleeding. However, until more data is available, it would still seem wise not to fly when thrombocytopenic or at least fly with platelet counts as close to normal as possible.

REFERENCES

1. Cockerell CJ: Basic Medical Equipment on Commercial Airlines, *NEJM* 314: 1052, 1986.
2. Personal communications.

*Professor of Medicine University of Hawaii School of Medicine
Accepted for publication April 1987

A Brief Review of Vitamin E

M. Kathryn Schaefer*

Vitamin E, also known as dl-alpha-tocopherol, can only be synthesized by plants. Common dietary sources include vegetable oil, shortening and margarine.¹ Vitamin E has an important role as an antioxidant in the human body. Due to its lipophilic structure it accumulates in lipoproteins, fat deposits, and most importantly, in cellular membranes where it reacts readily with singlet oxygen and free radicals, protecting unsaturated fatty acids from peroxidation. The Recommended Dietary Allowance of vitamin E is 10mg or 15 IU.

Symptoms of vitamin E deficiency in otherwise healthy people are limited to increased red blood cell membrane fragility², while premature infants often develop hemolytic anemia when fed formulas low in vitamin E. In children with chronic cholestasis who are unable to absorb vitamin E, there is a progressive loss of neurologic function with the development of areflexia, ataxia, sensory neuropathy and ophthalmoplegia. In abetalipoproteinemia, retinopathy and neurologic abnormalities can be prevented by supplemental doses of vitamin E.³

Vitamin E requirements increase as the intake of polyunsaturated fatty acids (PUFA) increase. The recent emphasis on high PUFA diets to reduce serum cholesterol may be of benefit in controlling heart disease, but the propensity of PUFA to form free radicals on exposure to oxygen may lead to an increased cancer risk. Thus it seems only prudent to increase vitamin E intake along with an increase in dietary PUFA.²

The original incentive for the popular usage of vitamin E by patients in minimizing scar formation is not known. However, the first reported effect of vitamin E on wound healing was in 1953, when a controlled study was done in patients with stasis ulcers. Oral vitamin E was found to promote a statistically significant greater degree of healing after four weeks in patients who had a history of deep venous thrombosis prior to ulceration.⁴ In 1983, the effect of vitamin E was studied on gingival wound healing in rats. Systemic vitamin E appeared to accelerate wound healing during the early stages of granulation and epithelialization, between days two and seven. Also there was less inflammation, suppuration and deformity of the healing tissue in the vitamin E-treated group.⁵

The mechanism of the effect of vitamin E on wound healing has not been fully established. However, based on recent research, it appears to involve an enhancement of the immune system and possibly a mild anti-inflammatory effect. Vitamin E has been shown to enhance the immune response locally by stimulating helper T-cell lymphocytes and the Langerhans cells

of the epidermis.¹² The anti-inflammatory effects of vitamin E stem from its ability to inhibit prostaglandin synthesis by decreasing phospholipase A₂ activity. Vitamin E consequently lowers platelet Thromboxane A₂ biosynthesis, but paradoxically, vitamin E elevates PGI₂ levels. This is because vitamin E prevents the decomposition of lipid peroxides, which in turn stimulate prostacyclin synthetase.¹³

Since vitamin E is a fat-soluble vitamin, it has the potential for toxicity. It is, however, the least toxic of the fat-soluble vitamins. No instances of toxicity in humans have been reported at doses of 300mg/day or less². Wheldon et al fed rats up to 2000mg/kg body weight per day of vitamin E for 104 weeks, which is approximately equal to more than 100,000 mg/day for an adult man. The very high levels of vitamin E that accumulated in the liver of the rats caused changes in serum liver enzyme activity. Hypoprothrombinemia developed secondary to a metabolic product of vitamin E, alpha-tocoquinone, which is an anti-metabolite of vitamin K. Vitamin K supplementation was sufficient to correct the hypoprothrombinemia. Also, there was an incidental decrease in mammary tumors in the female rats fed these high levels of vitamin E.¹⁵

Some potential therapeutic uses of vitamin E, as demonstrated in animal studies, include: Protecting lung tissue from the damaging effects of ozone in high-smog areas², inhibiting tumor formation in experimental systems such as skin and colon⁸, delaying the subsequent development of epidermoid carcinomas from precancerous leukoplakia⁶, and reversing the hyper-aggregability of platelets seen in diabetes mellitus¹³. In vitro studies have shown vitamin E inhibits growth and morphological changes in mouse neuroblastoma, glioma and melanoma cells⁷.

Platelets from diabetic rats are known to be deficient in vitamin E. Hyper-aggregability of platelets and diminished tissue PGI₂ biosynthesis is characteristic of diabetes mellitus. When diabetic rats received vitamin E as a dietary supplement, the critical balance between Thromboxane A₂ and PGI₂ was restored¹³. This could prove useful in preventing platelet aggregation that serves as a nidus in the formation of atherosclerotic lesions, which are accelerated in the diabetic.

Vitamin C is related to the metabolism of vitamin E in the body. Vitamin C acts to prevent vitamin E depletion, by reacting with the vitamin E-free radical that is formed when vitamin E reduces an oxidant substance.

Interestingly, vitamin A derivatives have been shown to have an anticarcinogenic effect similar to that of vitamin E. Etretinate, an aromatic retinoid, has been shown to enhance the toxicity in vitro of two chemotherapeutic agents that are clinically active against human malignant melanoma: Difluoromethornithine and vindesine⁹. Topical tretinoin (retinoic acid and Retin-A) has been used clinically to induce regression and complete remission

*John A. Burns School of Medicine IV '87

Accepted for publication April 1987

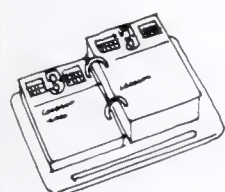
of intracutaneous metastases from malignant melanoma¹⁰. In the dysplastic nevus syndrome, where nevi are often precursors to melanoma, and where surgery is impractical in patients with many lesions, clinical trials have shown that retinoic acid caused regression of dysplastic nevi into benign compound nevi with minimal dysplastic change, or benign nevocellular nevi without dysplasia¹⁰. Its mechanism of action is believed to be related to promoting terminal differentiation¹¹.

In conclusion, current research has shown promising therapeutic benefits in the use of vitamin E, to inhibit tumor cell growth and to promote wound healing with very little added toxicity. Vitamin A derivatives have therapeutic potential in the management of malignant melanoma and dysplastic nevi.

REFERENCES

1. Janiszowski W, and Pinnock JF: The Biochemistry of Vitamin E in plants. *Vitam Horm* 34: 77, 1976.
2. Delvin TM: Textbook of Biochemistry with Clinical Correlations. John Wiley and Sons, Inc., 1982.
3. Olson RE: Vitamin E Deficiency and Neurologic Dysfunction. *Nutrition Reviews*, Vol 44, No 8, Aug. 1986.
4. Lee M: An Investigation into the Value of d,l-alpha tocopherol acetate (Vitamin E) in the Treatment of Gravitational Ulcers. *Br J Dermatology* 65: 131, 1953.

5. Kim JE, and Shklar G: The Effect of Vitamin E on the Healing of Gingival Wounds in Rats. *Journal of Periodontology*, Vol 54, No 5, May 1983.
6. Weerapradist W, Shklar G: Vitamin E Inhibition of Hamster Buccal Pouch Carcinogenesis: A Gross, Histologic and Ultrastructural Study. *Oral Surg* 54: 304-312, 1982.
7. Rama BN, and Prasak KN: Study on the Specificity of alpha-tocopherol (Vitamin E) Acid Succinate Effects on Melanoma, Glioma and Neuroblastoma Cells in Culture. Proceedings of the Society for Experimental Biology and Medicine 174, 302-307 (1983).
8. Odukoya O, Hawach F, Shklar G: Retardation of Experimental Oral Cancer by Topical Vitamin E. *Nutrition and Cancer* 6, 98-104, 1984.
9. Gaukroger JM, Wilson L, MacKie R: Cytotoxicity of Etretnate and Vindesine. *Br. Cancer* 52, 369-375, 1985.
10. Meyskens FL Jr., Edwards L, Levine NS: *J Am Acad Dermatology* 1986 Oct; 15 (4 Pt 2): 822-5
11. Niles RM: Chemical Induction of Tumor Cell Differentiation. *Surv Synth Pathol Res* 1985; 4(4):282-95
12. Schwartz J, Solt DB, Pappo J, Weichselbaum R: Distribution of Langerhans' Cells in Normal and Carcinogen Treated Mucosa of Buccal Pouches of Hamsters. *J Dermatol Surg Oncol* 7, 1005-1010, 1981.
13. Panganamala RV, Cornwell DG: The effects of Vitamin E on Arachidonic Acid Metabolism. *Annals New York Academy of Sciences* 1982: 376.
14. Horwitt MK: The Promotion of Vitamin E in the Symposium: Perceptions of Virtues of Foods. *J. Nutr.* 116, 1986: 1371-1377.
15. Wheldon GH, Bhatt A, Keller P, Hummler H: dl-alpha-Tocopheryl Acetate (Vitamin E): A Long-term Toxicity and Carcinogenicity Study in Rats. *Int. J. Vitam. Nutr. Res.* 12, 1983: 287-296.



Continuing Medical Education

Local Accredited Programs Ongoing

June 30-July 5, 1987	AIDS, Hepatitis: 1987 Update, co-sponsored with Reed Research Institute, Stacey Grace, Park West Building, 250 Arapahoe Ave., Suite 204, Boulder, Colo. 80302, (303) 442-8173. Location: Sheraton Royal Waikoloa, Big Island.
June 30-July 5, 1987	Fifth Annual Controversies in Obstetrics and Gynecology. UCI. Location: Mauna Kea Beach Resort, Big Island.
July 1-5, 1987	Emergency Medicine Focus on Pediatric and Geriatric Emergencies, Childrens Hospital of Los Angeles, Good Samaritan Hospital, Portland, Ore. (800) 421-5719. Location: Kauai.
July 11-18, 1987	Cardiology and Cardiovascular Surgery, Stanford School of Medicine, Office of Postgraduate Medical Education, (415) 723-5594. Location: Mauna Kea Beach Hotel, Kamuela.
July 11-18, 1987	Advanced GYN Endoscopic Surgery Laser and Non-Laser Techniques, Symposia Medicus, (415) 935-7889. Location: Stouffer Wailea, Maui.

July 12-19, 1987 Diving and Marine Medicine, Robert K. Overlock, MD, Hyperbaric Treatment Center, 42 Ahui St., Honolulu 96813, 523-9155. Location: Maui.

July 18-25, 1987 Lectures and Discussions on Topics in Gastroenterology and Hepatology, George Washington University Medical Center, Division of GI, Department of Medicine Washington, D.C., (202) 676-4285. Location: Waiohai Poipu Beach, Kauai.

Aug. 1-8, 1987 Ophthalmology, University of Southern California School of Medicine, 1975 Zonal Ave., KAM 314, Los Angeles, Calif. 90033. Location: Kamuela, Big Island.

Aug. 9-14, 1987 Neuropsychiatric Aspects of Sociopathy XIV Annual Symposium Southern California Neuropsychiatric Institute, (800) 423-9521. Location: Mauna Kea Beach Hotel, Kamuela.

Aug. 9-24, 15-22, 1987 Eighth Annual Advances in Clinical Medicine, Practical Clinical Updates for All Physicians and Surgeons, Physicians Medical Seminars. (800) 334-6578. Location: Maui and Oahu.

Aug. 16-26, 23-Sept. 2, 1987 30th Anniversary Postgraduate Refresher Course, USC. School of Medicine Postgraduate Division, 3500 S. Figueroa, Suite 217, Los Angeles, Calif. 90007, nationwide (800) 821-5094. In California (800) 521-6511 or (213) 746-1384. Locations: Honolulu/Maui; Maui/Kauai.

Aug. 22-29, 1987 Radiology, University of Southern California School of Medicine Postgraduate Division, (213) 224-7051. Location: Maui Marriott Hotel, Maui.

INSTRUCTIONS TO AUTHORS HAWAII MEDICAL JOURNAL

SUMMARY OF REQUIREMENTS

Type manuscript double spaced, including title page, abstract, text, acknowledgments, references, tables, and legends.

Each manuscript component should begin on a new page, in this sequence:

Title

Text

Acknowledgments

References

Tables: each table, complete with title and footnotes, on a separate page

Legends for illustrations

Illustrations must be good quality, unmounted glossy prints usually 12.7 by 17.3 cm. (5 by 7 in.) but no larger than 20.3 by 25.4 cm. (8 by 10 in.).

SUBMISSION OF MANUSCRIPTS

Mail the manuscript in a heavy paper envelope, enclosing the manuscript and figures in cardboard, if necessary, to prevent bending of photographs during mail handling. Place photographs in a separate, smaller, heavy paper envelope.

Manuscripts should be accompanied by a covering letter from the author who will be responsible for correspondence regarding the manuscript. The covering letter should contain a statement that the manuscript has been seen and approved by all authors. Include copies of any permissions needed to reproduce published material or to use illustrations of identifiable subjects. Mail to Editor, Hawaii Medical Journal, c/o Hawaii Medical Association, 320 Ward Avenue, Suite 200, Honolulu, Hawaii 96814.

PREPARATION OF MANUSCRIPT

Type manuscript on white bond paper, 20.3 by 26.7 cm. or 21.6 by 27.9 cm. (8 by 10½ in. or 8½ by 11 in.) with margins of at least 2.5 cm. (1 in.). Use double spacing throughout, including title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: Title Page, Acknowledgments, References, Tables and legends. Number pages consecutively, beginning with the Title Page. Type the page number in the upper right-hand corner of each page.

Manuscripts will be reviewed for possible publication with the understanding that they are being submitted to one journal at a time and have not been published, simultaneously submitted, or already accepted for publication elsewhere. This does not preclude consideration of a manuscript that has been rejected by another journal or of a complete report that follows publication of preliminary findings elsewhere, usually in the form of an abstract. Copies of any possibly duplicative published material should be submitted with the manuscript that is being sent for consideration.

TITLE PAGE: The title page should contain (1) the title of the article, which should be concise but informative; (2) a short running head or footline of no more than 40 characters (count letters and spaces) placed at the top of the title page; (3) first name, middle initial, and last name of each author, with highest academic degree(s); (4) name of department(s) and institution(s) to which the work should be attributed; (5) disclaimers, if any; (6) name and address of author responsible for correspondence about the manuscript; (7) names and address of author to whom requests for reprints should be addressed, or statement that reprints will not be available from the author; (8) the source(s) of support in the form of grants, equipment, drugs, or all of these.

TEXT: The text of observational and experimental articles is usually—but not necessarily—divided into sections with the headings: Introduction, Methods, Results, and Discussion. Long articles may need subheadings within some sections to clarify their content, especially the Results and Discussion sections.

Introduction: Clearly state the purpose of the article. Summarize the rationale for the study or observation. Give only strictly pertinent references, and do not review the subject extensively.

Methods: Describe your selection of the observational or experimental subjects (patients or experimental animals, including controls) clearly. Identify the methods, apparatus (manufacturer's name and address in parenthesis), and procedures in sufficient detail to allow other workers to reproduce the results. Give references to established methods, including statistical methods; provide references and brief descriptions of methods that have been published but are not well known; describe new or substantially modified methods, give reasons for using them, and evaluate their limitations.

Include numbers of observations and the statistical significance of the findings when appropriate. Detailed statistical analyses, mathematical derivations, and the like may sometimes be suitably presented in the form of one or more appendixes.

Results: Present your results in logical sequence in the text, tables, and illustrations. Do not repeat in the text all the data in the tables and/or illustrations: emphasize or summarize only important observations.

Discussion: Emphasize the new and important aspects of the study and conclusions that follow from them. Do not repeat in detail data given in the Results section. Include in the Discussion the implications of the findings and their limitations and relate the observations to other relevant studies. Link the conclusions with the goals of the study but avoid unqualified statements and conclusions not completely supported by your data. Avoid claiming priority and alluding to work that has not been completed. State new hypotheses when warranted, but clearly label them as such. Recommendations, when appropriate, may be included.

ACKNOWLEDGMENTS: Acknowledge only persons who have made substantive contributions to the study. Authors are responsible for obtaining written permission from everyone acknowledged by name because readers may infer their endorsement of the data and conclusions.

REFERENCES: Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals. References cited only in tables or in legends to figures should be numbered in accordance with a sequence established by the first identification in the text of the particular table or illustration.

Use the form of references adopted by the U. S. National Library of Medicine and used in *Index Medicus*. The titles of journals should be abbreviated according to the style used in *Index Medicus*.

TABLES: Type each table on a separate sheet; remember to double space. Number tables consecutively and supply a brief title for each. Give each column a short or abbreviated heading. Place explanatory matter in footnotes, not in the heading. Explain in footnotes all nonstandard abbreviations that are used in each table. For footnotes, use the following symbols in this sequence: *, †, ‡, §, ¶, **, ††. . . . Identify statistical measures of variations such as SD and SFM.

ILLUSTRATIONS: Submit the required number of complete sets of figures. Figures should be professionally drawn and photographed; freehand or typewritten lettering is unacceptable. Instead of original drawings, roentgenograms, and other material, send sharp, glossy black-and-white photographic prints, usually 12.7 by 17.3 cm. (5 by 7 in.) but no larger than 20.3 by 25.4 cm. (8 by 10 in.). Letters, numbers, and symbols should be clear and even throughout, and of sufficient size that when reduced for publication each item will still be legible. Titles and detailed explanations belong in the legends for illustrations, not on the illustrations themselves.

Each figure should have a label pasted on its back indicating the number of the figure, the name of the authors, and the top of the figure. Do not write on the back of the figures or mount them on cardboard, or scratch or mar them using paper clips. Do not bend figures.

LEGENDS FOR ILLUSTRATIONS: Type legends for illustrations double spaced, starting on a separate page with arabic numerals corresponding to the illustrations. When symbols, arrows, numbers, or letters are used to identify parts of the illustrations, identify and explain each one clearly in the legend. Explain internal scale and identify method of staining in the photomicrographs.

**Strong.
Sensible.
Sound.**



Medical Insurance Exchange of California

**Professional Liability Insurance Exclusively.
Sponsored by Hawaii Medical Association.**

6250 Claremont Avenue, Oakland, California 94618-1324
Telephone (415) 428-9411, outside California (800) 227-4527
Or call Hawaii Medical Association, 536-7702

And you own it.

HOW TO REDUCE RECEIVABLES

WITH MIBS

MEDICAL INFORMATION and BILLING SYSTEM

MIBS is an advanced outpatient medical billing system. MIBS is a total in-house system utilizing an IBM PC/AT or PC/XT. MIBS is designed for Hawaii's Physicians including extensive capability for HMSA insurance claim processing. This system offers the following advantages:

- **Daily Billing**

Processing billing statements daily or weekly improves cash flow and evens out clerical workload. A patient's first statement is based on when the first charge is available for billing. Accounts with an existing balance continue to receive one statement per month at the same time of the month. Daily billing improves cash flow by reducing the time between a patient's first visit and their first bill.

- **Collection Letters**

The practice can design and automatically generate collection letters for delinquent accounts. Practice generated collections letters are many times as effective as those sent by a pre-collection service.

- **Statement Dunning Messages**

Dunning messages on billing statements are based on the age of the account balance. This allows the practice to communicate the delinquency of the account to the patient.

- **Payment Plan**

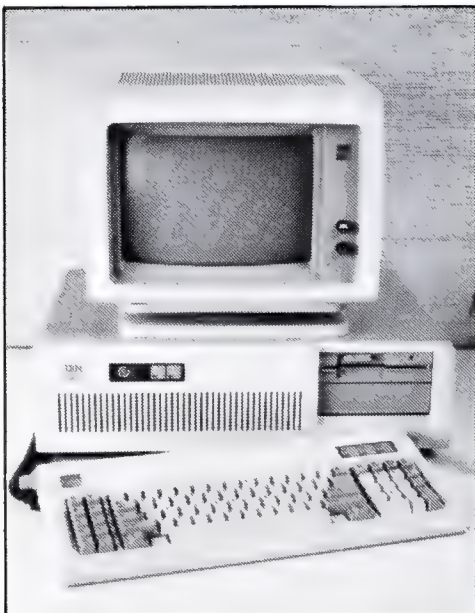
Budget payment plans or "promise to pay" amounts can be set and tracked by MIBS. Budget payment amounts are printed on the billing statement.

- **Service Charge**

Assessing a service charge improves the collection rate. Many patients pay their accounts earlier to avoid a service charge.

- **Delinquent Account Report**

MIBS generates a report of delinquent accounts based on user specified criteria allowing the practice to focus collection efforts.



MIBS: MEDICAL INFORMATION and BILLING SYSTEM

Advanced medical billing + IBM PC Equipment (PC/XT™ or PC/AT™)
+ extensive PPMS training + professional service + continuous support

For a DEMONSTRATION on how MIBS can improve your MEDICAL BILLING
Call Bill Liggett at 521-2397.

PPMS

Pacific Professional Management Systems, Inc.

1188 Bishop St. Suite 3010 Honolulu, Hawaii 96813 Ph. 521-2397

Flecainide Overdose

Sukchai Satta, MD*

Douglas M. Rogers, MD*

Introduction

Flecainide acetate (Tambocor[®]), is a new class IC anti-arrhythmic agent marketed in the United States. Flecainide slows atrial, A-V nodal and ventricular conduction velocity, and prolongs the refractory period of the structures.^{1, 2} Recent studies with oral flecainide therapy suggested its high potential for suppression of ventricular tachycardia in humans.^{3, 4, 5} Its favorable pharmacokinetics with an average plasma half-time of about 20 hours allow twice-daily dosing in most patients.⁴ The following case report illustrates the dangers of an overdose.

The most common undesirable effects of flecainide are on the central nervous system, including dizziness (32%), visual disturbances (30.1%), headache (10%), nausea (10%), nervousness (5%) and tremor (4%). The figures in parentheses are taken from a recent review of the long-term use of flecainide in 280 patients.⁶

Flecainide prolongs the QTC interval and might therefore also be expected to cause ventricular tachy-dysrhythmias. Pro-arrhythmic effects have been reported in 7% to 8% of the patients, with high incidence in patients with serious ventricular tachycardia and reduced myocardial function.

One case was reported in the literature in which a patient had flecainide-induced aggravation of ventricular tachycardia necessitating resuscitation because of severe hemodynamic deterioration.⁷

There were four anecdotal reports of flecainide overdose in suicidal attempts, three of them not in the U.S.; two died and two survived.

Case Report

The following case is that of a 50-kilo, 20-year-old woman who was prescribed flecainide 10 mg bid (28 tablets) for her symptomatic and frequent PVCs with R and T phenomenon on the Holter monitor test. After a domestic argument with her boyfriend, she overdosed on 20 100 mg Tambocor (flecainide acetate) tablets.

The woman was admitted to the hospital at 20:00 hours, two hours approximately after the incident. She was lethargic, responding inappropriately, and had had focal seizures alternating on one side or the other. The radial pulse was weak and the systolic blood pressure was palpable at 70 mm Hg. Intravenous fluid and dopamine were administered in order to maintain normal blood pressure. Shortly after admission, the patient had a grand-mal seizure.

Because of respiratory distress, an endotracheal tube was inserted in order to improve ventilation. The patient went into ventricular tachycardia, ventricular fibrillation, and then cardiac arrest at 22:00 hours. Cardiopulmonary resuscitation was done, lasting 10 minutes while intravenous epinephrine, atropine and five defibrillations were given. The patient responded with nodal tachycardia at a rate of 100 per minute, alternating with severe bradycardia and sinus arrest. A transvenous pacemaker was inserted. The blood pressure became stable at 110/80, whereupon dopamine was discontinued.

The patient was transferred from the Emergency Room to the Intensive Care Unit at 24:00 hours, and since she was unconscious, she was connected to a ventilator. Throughout that night the patient exhibited severe bradycardia, sinus arrest, widening of QRS complexes, multiple premature ventricular contractions, and short runs of ventricular tachycardia. The potassium level was 3.3 meq/l, requiring intravenous KCl. The temporary pacemaker was in proper position but was capturing sporadically. During her stay in the Intensive Care Unit, the patient had ventricular fibrillations with cardiac arrests at 0600 hours, 0700 hours and at 14:00 hours. She responded each time to the same procedures that were given the night before. An intravenous Lidocaine bolus and Lidocaine continuous drip were given.

Since the potassium level was 3.1 (Normal 3.6-5.0 meq/l), calcium level 8.2 (Normal 8.5-10.5 mg/dl) and Magnesium level normal at 2.8 (Normal 1.0-2.4 mg/dl), intravenous potassium and intravenous calcium were given. The arterial blood gases were monitored frequently. CK was 3880 (CK-MB 350 International Units/liter). The patient gradually responded and the rhythm of abnormal QRS complexes with widening and erratic behavior, became normal. The P-wave started to reappear, and in a few hours after Lidocaine infusion, regular sinus tachycardia and very rare premature ventricular contractions were noted.

The patient gradually regained consciousness and cardiac and respiratory status improved. On day two, Lidocaine was discontinued, the temporary pacemaker and the endotracheal tube were removed.

The flecainide blood level on the day of admission was 4.2 mg/l, the normal therapeutic range being 0.2-1.0 mg/l. On the third day the level was 0.1. Other medications were administered during hospitalization: Intravenous Valium and phenobarbital to control the seizures that occurred a few times on the first day, intravenous Cefoxin prophylactically for aspiration pneumonia and intravenous furosemide to maintain adequate output.

The patient was free of seizures thereafter. The only abnormal physical findings were visual field defects, central and peripheral OD and central OS. Weakness and incoordination of all extremities together with ataxic dysarthria of the tongue and

*Kona Hospital
Kona, Hawaii

Accepted for publication April 1987

larynx were also observed.

The abnormal physical findings gradually disappeared and two weeks post-admission the patient was able to walk and feed herself. Visual field defects returned to near-normal. The ataxic dysarthria also improved. A CT-scan of the head showed no definite abnormality. An EEG showed a diffusely abnormal tracing because of the slow background; however, no focal abnormalities were present. The EEG was read as being consistent with a structural or metabolic encephalopathy.

Discussion

This case is believed to be the first reported case of overdose with flecainide acetate and survival in the U.S. There were no details as to whether the two cases reported from foreign countries survived or not.

The 20 tablets of flecainide may not have been all absorbed. The patient received gastric lavage promptly in the Emergency Room and parts of the medication were noted by the Emergency Room attendant, but were not tested. No specific antidote has been identified as yet for the treatment of flecainide overdose.

Animal studies have suggested that the following events might occur with overdosage: Lengthening of the PR interval, increase in the QRS duration, QT interval and amplitude of the T-wave, a reduction in myocardial rate and conductivity, conduction disturbances and hypotension and death from respiratory failure or asystole.

Treatment of an overdose should be supportive and may include the following: Administration of isotropic agents or cardiac stimulants such as Dopamine, Dobutamine or isoproterenol, mechanically assisted respiration, circulating assists such as intra-aortic balloon pumping, and transvenous pacing in the event of conduction block.

Because of the prolonged plasma half-life of flecainide (12 to

27 hours in patients receiving the usual doses), and the possibility of markedly non-linear elimination kinetics at very high doses, these supportive treatments may need to be continued for extended periods of time. Hemodialysis is not an effective means of removing flecainide from the body (from the insert on TAMBACOR, Riker Laboratories).

This patient started to recover about 22 to 24 hours after the onset of overdose and had four cardiac arrests and four successful cardiopulmonary resuscitations prior to recovery. The temporary pacemaker was working only sporadically; the patient responded to Lidocaine, which was started about 20 hours after the overdose; this may also be due to the fact that the flecainide blood level was down to the therapeutic range at that time. The visual disturbance was transient as was her neurological deficit.

REFERENCES

1. Borchard U, Hirth C, Schulze JJ: Pharmakologische und electrophysiologische Untersuchungen zu Flecainid. In Flecainid-Experimentelle und klinische Erfahrungen, (Eds. Bender F, Cronheim G). Verlag Vustav Vischer, Stuttgart, New York, 1982, 11.
2. Hodess AB, Follansbee WP, Spear JF, Moore EN: Electrophysiological effects of a new anti-arrhythmic agent, flecainide, on the intact canine heart. *J Cardiovasc Pharmacol* 1,427 (1979).
3. Anderson JL, Steward JR, Perry BA, Van Hamersveld DD, Johnson TA, Conrad CJ, Chang SF, Kvam DC, Pitt B: Oral flecainide acetate for the treatment of ventricular arrhythmias. *N Engl J Med* 305, 473 (1981).
4. Duff HJ, Roden DM, Maffucci RJ, Vesper BS, Conrad GJ, Higgins SB, Oates JA, Smith RF, Woosley RL: Suppression of resistant ventricular arrhythmia by twice daily dosing with flecainide. *Am J Cardiol* 48, 1133 (1981).
5. Hodges M, Haugland JM, Granrud G, Conrad GJ, Asinger RW, Mikell FL, Krejce J: Suppression of ventricular ectopic depolarization by flecainide acetate, a new anti-arrhythmic agent. *Circulation* 65,879 (1982).
6. 66. Gentzkow GD, Sullivan JY (1984) Extracardiac adverse effects of flecainide. *Am J Cardiol* 53, 101B.
7. Hohnloser S, Zeiher A, Hust MH; Willschläser H, Just H: Flecainide induced aggravation of ventricular tachycardia. *Clin Cardiol* 1983 Mar; 6(3): 130-5.



Joined by members of the Hawaii Society of Otolaryngology-Head and Neck Surgery, Inc., and the Hawaii Medical Association, Governor John Waihee proclaims May Better Hearing and Speech Month throughout the state. Standing, left to right, Major Larry Zieske, MD (Secretary, Hawaii Society of Otolaryngology); Kazuo Teruya, MD (Member-at-large, Hawaii Society of Otolaryngology); Raymond Fodor, MD (President, Hawaii Society of Otolaryngology); Jon Won (Executive Director, Hawaii Medical Association); Walter W.Y. Chang, MD (President, Hawaii Medical Association). Seated, center, Governor John Waihee.

Osteoporosis: Will the Use of New Technology Increase or Decrease Health Care Costs?

Richard D. Wasnich, MD; Ryan Hagino, BS; Philip D. Ross, PhD

It has been estimated that osteoporosis accounts for 1.2 million fractures annually, and \$6.1 billion in costs in the United States.¹ Skeletal strength and fracture susceptibility are related to bone mass, and recent prospective data have shown a strong inverse relationship between bone mineral content (BMC) and fracture incidence.² Therefore the potential to institute rational and objective osteoporosis prevention programs now exists, based upon objective measures of (future) fracture risk.

Some investigators have questioned clinical application of this technology, largely based upon its technical limitations, potential for misuse, and relative scarcity of prospective data.³

The decision to apply a new drug, or technology, in medicine cannot be made in a solely academic context. Use of an experimental drug may be quite justified when there are no alternatives. Thus the decision to use BMC measurement technology is strongly influenced by the answers to the following questions:

Questions

1. Q: How successful is current medical practice with regard to osteoporosis prevention?

A: Despite the availability of various agents, in particular estrogen, which can slow bone loss, the incidence of fractures appears to be increasing rapidly. Only a minority of women are receiving estrogens, and long-term compliance is low. One major possible reason for this is the justifiable reluctance of physicians to treat patients indiscriminately, in the absence of symptoms or objective indications. Poor compliance by patients can also be explained by this same factor.

2. Q: Can a physician, based upon demographic and clinical factors alone, accurately assess either skeletal mass or future fracture risk?

Reprint requests to: Richard D. Wasnich, MD, Kuakini Osteoporosis Study, Kuakini Medical Center, 347 N. Kuakini St., Honolulu, Hawaii 96817

* Kuakini Osteoporosis Study
Kuakini Medical Center
347 N. Kuakini St.
Honolulu, Hawaii 96817

Accepted for publication April 1987

A: Despite continuing recommendations by some experts to select probable "high-risk" patients based upon historical "risk factors," there is *no* evidence to indicate that this approach is accurate for *individual* patients. Although fracture risk is significantly related to age, aging is not amenable to medical intervention. Bone mineral content *can* be influenced by medical intervention, and the association between BMC and fracture risk is highly significant even after taking age into account. Finally, data from the Kuakini Osteoporosis Study (KOS) indicate that no more than 35% of the variability in BMC can be accounted for by age, body size, menopausal status, and other variables.

3. Q: Why not treat all menopausal women identically, with a regimen including estrogens?

A: Although osteoporosis is very common in older women, not *all* women develop fractures; there is evidence to indicate that there is a low-risk subpopulation that does not require hormonal therapy. Thus an indiscriminate, "shotgun" approach would overtreat these women. It could also *undertreat* another subpopulation that is at exceptionally high risk or that shows inadequate response to estrogens. Both undertreatment and overtreatment are costly.

4. Q: The U.S. population is aging rapidly; what is the projected impact of this changing age distribution upon fracture incidence and its associated costs?

A: Based upon the proportion of women at fracture risk, (using KOS prospective fracture incidence data), a model has been developed that indicates what *relative* changes in fracture incidence would result from various factors, including treatment, and also aging of the population. This model indicates that a *one-year* increase in life expectancy would increase fracture incidence and costs by 2.8%. A five-year increase in life expectancy would increase costs by 14.4%. Based upon the current, estimated national cost of \$6.1 billion, that would translate into \$170 million and \$880 million respectively, in 1986 dollars.

5. Q: What is the cost (both medical and economic) of postponing institution of *objective* preventive management of bone loss?

A: That question is nearly impossible to answer. However, based upon the model described above, the impact of a selective (as opposed to a "shotgun") approach can be estimated. (The selective approach treats according to actual level of risk; the the women at lowest risk receive calcium only; average-risk women receive estrogen plus calcium; and women at the highest risk receive one additional agent). Such an approach would reduce fracture incidence and associated costs by an estimated 34.8% over the next 30 years, for a saving of \$2.12 billion in 1986 dollars. However, a five-year postponement of an objective prevention strategy would cost \$634 million in 1986 dollars.

6. Q: Can the cost of routinely measuring bone mass in perimenopausal women be justified?

A: As shown in Table 1, the cost of indiscriminately treating all 50-year-old women with estrogens for the remainder of their lifetimes would be \$6 billion, and the resulting reduction in fracture costs would save \$2.5 billion, for a net cost of \$3.5 billion.

On the other hand, if all 50-year-old women in the United States had objective risk assessment by appendicular BMC measurements, the one-time, initial cost would be approximately \$58 million. However, treatment costs would be reduced to \$3 billion, and the fracture cost reduction would amount to \$2.12 billion. Thus, the net cost of a selective, discriminate approach (\$938 million) is actually substantially less than the indiscriminate approach (\$3.5 billion).

7. Q: What are the potential risks or adverse effects of the photon absorptiometry techniques, if applied to an entire segment of the population?

A: There are no known or anticipated risks from an os calcis or radius scan. The radiation exposure, which is limited to the small area actually scanned, is 5 mRem. This compares to exposures of 15 mRem for a chest X-ray, and 200-500 mRem for a mammogram.

8. Q: The suggested, selective approach to osteoporosis prevention is wholly dependent upon the validity of the early, prospective data relating BMC to fracture incidence. Recognizing that the expense and logistics of cohort studies preclude rapid confirmation of this data:

(a) Are there any other types of data to support the conclusion that BMC is predictive of fracture risks? And, (b) What is the potential for misclassifying an individual's fracture risk using the available, prospective data?

A: (a) There is an extensive volume of both in-vitro and cross-sectional data indicating a strong, inverse relationship between bone mineral content and fracture risk. In this context, the findings of the prospective cohort studies are predictable and reasonable.

(b) Although there is some potential for misclassification of an individual using currently available data, the magnitude of error is relatively small, since uncertainties in defining the fracture threshold appear to be much less than the variability among individuals. For example, an uncertainty in the fracture threshold of 10 mg/cm² for the os calcis (314 vs. 324 mg/cm²) represents only about 5.5% of the female population (over age 35), and only 2% of younger women (ages 30 to 45).⁴

9. Q: The available prospective data are largely limited to spine, wrist, and other limb fractures. Since hip fracture is the most serious outcome of osteoporosis, should we

not wait until prospective hip fracture data are available before instituting objective prevention programs?

A: Osteoporosis is a generalized disease of the skeleton, affecting a *subpopulation* that will exhibit fractures at various sites depending upon age, degree of trauma, BMC and multiple other factors. Many individuals in this osteoporotic subpopulation will experience multiple fractures. Thus in any individual, as well as in any population, wrist and long bone fractures would be expected first (in the 50s), spine fractures next (in the 60s), and hip fractures last (in the 70s and 80s). Epidemiologic data indicate that an individual with *any*, non-traumatic fracture is "at risk" for other fractures.⁵

Therefore, attempts to identify this osteoporotic subpopulation by way of a late manifestation (i.e., hip fracture), as opposed to an early manifestation (i.e., wrist or spine fractures) may, in fact, be the wrong approach, since prevention of osteoporosis is dependent upon early identification and treatment of this subpopulation. An analogy to hypertension and stroke is helpful. Certainly TIAs are of less consequence than strokes, but the same subpopulation is at risk for both events. Thus TIAs, like wrist fractures, should be considered valuable markers for those individuals at risk for more serious outcomes (such as strokes or hip fractures, respectively).

Conclusion

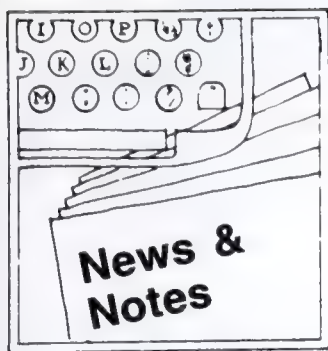
The use of BMC measurements to determine fracture risk objectively and to treat patients selectively is analogous to the use of blood pressure measurements in managing hypertension. It must be remembered that the very definition of this disease is fracture risk (and *not* fractures), and that fracture risk is defined by levels of bone mineral content. Therefore, any decision NOT to use BMC measurement technology should be defended with data showing that other approaches (i.e., historical risk factors) can successfully predict *individual* fracture risk.

TABLE 1

Approach	Initial Assessment	Cost of Treatment	Reduction in Fracture Costs	Net
Discrimination	\$85 million	\$3 billion	-\$2.12 billion	\$938 million
Indiscrimination	0	\$6 billion	-\$2.5 billion	\$3.5 billion

REFERENCES

1. Holbrook TL, Grazer K, Kelsey JL, Stauffer LN: The frequency of occurrence, impact and cost of selected musculoskeletal conditions in the United States. Chicago: American Academy of Orthopedic Surgeons, 1984.
2. Wasnich RD, Ross PD, Heilbrun LK, Vogel JM: Prediction of postmenopausal fracture risk with bone mineral measurements. *Am J Obstet and Gynecol*: 1985, 153: 745-751.
3. Ott S: Should women get screening bone mass measurements (Editorial). *Annals of Int Med*: 1986, 104: 874-876.
4. Ross PD, Wasnich RD, Heilbrun LK, Vogel JM: Definition of a fracture threshold based upon prospective fracture risk. Bone: in press.
5. Marshall DH, Horsman A, Simpson M, Francis RM, Peacock M: Fractures in elderly women: Prevalence of wrist, spine and femur fractures and their concurrence. In Osteoporosis: Proceedings of the Copenhagen International Symposium on Osteoporosis, June 3-8, 1984. Christiansen C, Arnaud CD, Nordin BEC, Parfitt AM, Peck WA, Riggs BL, (eds). Copenhagen, Denmark: Glostrup Hospital, Denmark, 1984, pp. 361-363.



HENRY YOKOYAMA, MD

Re: Quality of Life (as rated by relatives): Loss of energy (81%); poor memory (33%); irritability (46%); depression (46%); diminished sexual function (65%).

When to start drug therapy: If diastolic pressures are elevated three times on two different occasions . . . If 100 — start treatment; if 95 or less — consider drug therapy . . .

Non-Drug Therapy: (1) Weight reduction if obese; (b) Sodium restriction — 2 gm/d; (c) More fiber and less saturated fats; (d) Supplemental K, Mg, Ca *not* needed; (e) Confine alcohol intake to 2 oz/d; (f) Regular isotonic exercises; (g) Relaxation therapy.

Re: Jogging: "Joggers don't actually live longer . . . They just seem to . . ."

Re: Smoking: "Cessation of smoking does not lower BP . . . weight goes up and BP in turn rises . . ."

Drug Therapy: Response to Beta blockers decreases with increasing age; response to calcium channel blockers increases with increasing age . . .

Present Choice of Drug Therapy for Mild Hypertension: (a) Diuretics 90%, (b) Beta blockers 8%, (c) Others 2%.

Future Choices of Drug Therapy: Younger Population: (1) CEI (Conversion Enzyme Inhibitors), (2) Alpha blockers, (3) Beta Blockers, (4) Central agonist . . . Older Population: (1) Calcium channel blockers, (2) Alpha blockers, (3) Diuretics, (4) Central agonist . . .

Highlights of Lecture on Tort

(By doctor-lawyer S.Y. Tan at Mabel Smythe conference, Jan. 2 1986:)

The Pros and Cons of Tort Law . . . Five basic principles:

1—*Principle of joint and several liability*. If more than one person is at fault the victim has the right to recover from all those persons the full amount of damages . . . "But for . . ." there would have been no injury . . . AMA and doctor groups: "It is not fair that one individual be responsible for the entire amount . . ." Hence terms the "1% Law" and "deep pocket" (e.g., the hospitals, City & County and state governments). The law has been changed somewhat in Hawaii . . . Lawyers' position: "You are none the less "But for" (tortfeasor) responsible.

2—*Collateral Source Rule*. The jury that decides liability cannot be told the source of the monies . . . MD position: "Not fair . . . leads to "double dipping" e.g., from HMSA and the wrong doer . . ." Plaintiff lawyer: "It doesn't matter . . . e.g., HMSA was paid for . . . Payment from collateral source has nothing to do with the case . . ."

3—*Contingency Fee*. One-third or more . . . If no recovery, attorney doesn't get anything except court costs . . . MD position: "Encourages frivolous suits . . ." Attorneys: "It always make sense . . . We spend time with words . . . We have no tools except words . . . We have to be skilled in using 'words' (Lots of B.S. mixed in . . .)"

4—*Caps on Damages*. In California, \$250,000 . . . "Pain and suffering" not easily measurable is non-economic costs . . . Traditional law: No caps . . . Lawyers' position: "Unfair to cap . . . You are penalizing the seriously injured, e.g., paraplegics."

5—*Rule XI*. Governs the conduct of the attorney as he evaluates and files suit in federal court — not in state courts as yet . . . Old Rule XI: Attorney signs "to the best of his knowledge."

New Rule XI: protects against frivolous suits . . . form of reasonable inquiry . . . penalties for attorneys in frivolous suits . . . Judge can impose fine . . . Old rule "willful violation" . . . If no reasonable inquiry into matter of the case, court shall impose fine . . .

Life in These Parts III

The latest statistics compiled by Bank of Hawaii economists show that in 1985, the health care industry costing \$1.9 billion was three times larger than sugar and pineapple sales combined . . . Economists expect the figure to grow to \$2.6 billion by 1990 and \$6 billion by 2005 . . . Nationwide, 40.8% of all medical costs came from hospital stays and 26% went to physicians and dentists . . . Consumers paid only 24.6% of the health care costs while federal, state, and local governments paid for 41.4% and health insurance paid 31% . . .

Denis Mee Lee, 45, third-generation Chinese, originally from Australia who was Mental Health Division director for 9½ years, plans to resign as of Feb. 28 . . .

AZT (azidothymidine), the antiviral drug given to AIDS victims, increases the number and function of T cells depleted by the AIDS virus . . . The Queen's pharmacy has received approval to dispense AZT by meeting the stringent requirements of NIH and the Burroughs Wellcome Co.

Dick Warsnick, principal investigator of the KMC Osteoporosis Center, says that youngsters who are excessively active and don't eat right are affecting their skeletal growth and are increasing their chances of developing osteoporosis . . . e.g., girls running long distances become amenorrheic and research shows low estrogen levels, which means less bone formation . . . The center's three-year study is focused on preventing and treating elderly women with alternating cycles of Didronel and calcium pills . . . Didronel is approved by FDA for treating Paget's disease.

The Division of Forestry and Wildlife is considering the eradication of marijuana growing on state-owned and stage-managed conservation district lands. Most of the testimony at a hearing was against the use of sprays, either Chevron Weed Oil or glyphosate (Round-up or Rodeo Wilt). Maui nephrologist Steve Moser had done a computer search on the health risks from glyphosate and Weed Oil, but the data was incomplete. Steve cautioned, "We the residents of Maui will become experimental animals whose reactions to the chemicals will provide the missing data in human experiments without informed consent."

Hors de Combat

The Board of Medical Examiners revoked the licenses of Richard A. Williams, Jr., William F. McCook and Pershing S. Lo . . . Ronald M. Sterling's license was suspended for six months pending legal proceedings involving Medicaid charges . . .

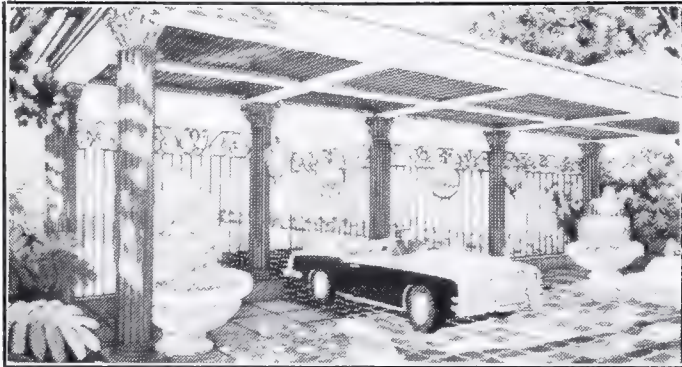
From the 1987 Legislature: the HMA hopes for revision of the tort reform because last year's package didn't go far enough in any of the areas it addressed . . . The HMA also hopes for increases in Medicaid rates which are now based on a 1979 fee schedule . . .

State and medical officials say Medicaid patients have trouble finding dentists and doctors to care for them because the reimbursements are 40¢ on a dollar or 79.5% of the


(Continued on page 208)

REAL ESTATE OPPORTUNITIES

Libbe Company



THE WAIALAE PINNACLE

 Just fifteen minutes from downtown Honolulu lies one of the most spectacular developments on the island of Oahu. Five magnificent homesites surrounded by lush preservation land. Each homesite with unsurpassed views and large enough to build your true dream home. Electronic wrought iron gates open onto cobblestone courtyard reminiscent of a Roman piazza. Palatial walls, dancing fountains and beautiful landscaping make this project a paradise in paradise.

Design your own home or we will design and build for you.

Homesites start from \$440,000 (fee simple)

1060 Young St.

523-1381

Hono., HI 96814

SCULLY ROGERS LTD. PRESENTS



HAWAII'S MOST PRIZED PROPERTY OCEANFRONT FEE SIMPLE

THE MAGIC OF MALAEKAHANA. OAHU'S MOST PERFECT BAY. QUIET. SECLUDED. 1.27 ACRES IN FEE SIMPLE. TO THOSE WHO KNOW AND SO APPRECIATE... A RARE, RARE FIND! NOW OFFERING A HALF INTEREST FOR ONLY.

\$225,000

Scully Rogers
LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 715, Honolulu, Hawaii 96815



PRESTIGIOUS NEIGHBORHOOD

Panoramic view-Diamond Head, shoreline, ocean, waves. Open deck around POOL. Three bedrooms, 2 baths; terraced, fenced yard. Plush carpets, decorator accents. On the upper side of street — room for expansion. Private, cool, quiet. Fee available.

MLS 31642..... \$350,000 (L)

KAI (R), BOB (RA) OSTREM

737-1190

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

REAL ESTATE SERVICES

Member: The Honolulu Board of Realtors and MLS

**A TOTAL STAFF — AND REALTY SERVICE
IN WAIANAE**



Marie Hatfield (RA)



Paul Carter (RA)

Larry Hatfield (PB)
Alyce Phillips (RA)
Madeline Mong (RA)
Doris Oshiro (RA)
Jill Johnson (RA)
Anne White (RA)
Sharon Moore (RA)

**Call:
696-8415**

Becky Lupski (RA)
Alberta Keamo (RA)
Arch Cook (RA)
Valerie Cook (RA)
Denise Martin (RA)
C. Gay Hatfield (RA)
Phylis Perry (RA)

PROPERTY OF THE MONTH

2 bdrm. Waterfront Penthouse
Makaha Shores \$155,000

HAWAII HATFIELD REALTY CORP.

85-833 Farrington Hwy., Waianae

SALES • VA/FHA • MANAGEMENT • NOTARY

REAL ESTATE OPPORTUNITIES

NUUANU DOWSETT



Nuuanu Stream and historic Auwai ponds create an unusual setting for this eight-year-old custom designed 3 bedroom, 3 bath, two-story contemporary home. Separate family room; library/guest room; enclosed laundry; dramatic vaulted ceilings in living/dining room. Enjoy cozy evenings around the fireplace. FEE SIMPLE. MLS 32698. Priced at appraisal. **\$605,000.00**

Call Susan L. Burgess (RA) 734-4242

HILL & CO.

specialists in fine residential properties

HONOLULU

373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



PAIKO OCEANFRONT

4 bedroom, 3 bath home completely rebuilt with the highest attention to quality and designer details. Includes ultra modern kitchen, formal dining room with wet bar, sunset room, family room, fireplace and pool. Enjoy magnificent views from the secluded location. Fee available! (36798) **\$895,000 (L)**

Vivian Fagan (R) 373-2351

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

PRICED RIGHT FOR LOCAL CONSUMPTION!

FEE SIMPLE OCEANFRONT PROPERTIES

NIU. . . 2 bedroom 2½ bath two story home beautifully situated between the ocean and a spring-fed Koi Pond. Needs your decorating expertise. Ideal bachelor pad or retirees "house of tranquility."

\$375,000

WAILUPE. . . a delightful two bedroom two bath architect designed home is reached via a long quiet lane, far from the rush and noise of the highway. A family room, dining room, fireplace, open beam ceilings, workshop, and a hobby or gun room are just some of the extras here.

\$550,000

LANIKAI. . . this 2 bedroom 2 bath fixer upper or "tearer downer" is situated on a 10,000 sq. ft. lot in one of our islands more popular areas. Join the many who are building new estates in this wonderful spot.

\$425,000

KAILUA BAY. . . here is a brand new DREAM HOME reluctantly being sold by a couple who designed and meticulously built it for a lifetime of glorious oceanfront living. It is an adult house with three totally separated bedroom suites ideal for either individual privacy or suited for a BED AND BREAKFAST operation. A courtyard pool and spa complete this most inviting picture. A "MUST SEE"!

\$495,000

NORTH SHORE "PIPELINE". . . what a spot to spend the week-end or to retire to as soon as possible!! The sights and sounds, view and beach are almost impossible to describe, they are so spectacular. This spotless 2 bedroom 1½ bath cottage by the sea is a true little jewel.

\$285,000

HAWAII LOA RIDGE

Fee Simple, Maono Place. Custom design 3 bdrm. 2½ baths w/large family room spectacular ocean views. Extensive use of oak & marble. Fireplace & deep lanai.

\$595,000 MLS 36226

Call Beth Chang (R) 524-6909

FEE SIMPLE - PRIME LOCATION APARTMENT BUILDING

Desirable and Rarely Available - One 2-Bdrm. and three 1-Bdrm. units in well-maintained condition. Reroofed, repainted, and new copper wiring within past few years. Close to beach, restaurants, hotels, Ala Moana Shopping Center, theaters, and near busline.

ASKING PRICE: \$375,000. MLS #26022

Call Joanna Young (R) 531-5399

Bradley
PROPERTIES LTD.
(808) 523-0456

1177 Kapiolani Blvd., Honolulu, HI 96814



Waterfront Properties
INC.

1188 BISHOP ST., #2407

531-5311

Book Review



The Good News About Depression Mark S. Gold, MD, Polemic: "A Controversial Argument," from the *American College Dictionary*, Random House New York.

Having many characteristics of a polemic, this book about depression and its treatment certainly presents a particular view of this common psychiatric disorder. Gold's thesis, one which is fairly well accepted by the psychiatric profession, but also one which he tends to overstate at times, is that depression is a biological illness that has a genetic basis and involves particular neuro-transmitters.

He also is quick to point out that there are a number of other medical illnesses that can present with symptoms that mimic major depressive disorders. Various drugs, vitamin deficiencies and other metabolic disturbances can also cause a symptom complex that presents as depression.

Gold proceeds to discuss what the psychiatric disorder of depression does consist of. In these chapters, he discusses the feeling states associated with depression as well as a psychological construct known as "learned helplessness." He goes on to talk about some of the somatic concomitants of depression, and discusses these under the concept of "masked depression."

Gold expresses the view that some forms of bulimia and anorexia nervosa are related to depression in terms of both brain chemistry and brain function. He also relates irritable bowel syndrome, hypertension, and fibromyalgia (fibrositis) as being possible equivalents of depression. He then discusses some of the biological factors associated with depression including inheritance and some of

the theories of the biochemistry of depression.

After proceeding to discuss the potential mimickers of depression and potential causes of depression, Gold explores some of the diagnostic and treatment techniques that are available today. It is here that he tends perhaps to overstate the usefulness of some of our psychiatric diagnostic technologies. This may be in part because of Gold's personal involvement in Psychiatric Diagnostic Laboratories of America (PDLA), the first and largest full-service psychiatric laboratory in the country.

Following discussion of various diagnostic techniques, Gold talks about the bio-psychiatric treatment of depression. In this segment of the book, he does provide some very concrete and useful guidelines for the pharmacotherapy of depression. I again feel, however, that he overemphasizes the usefulness of some of his laboratory tests such as the DST and the TRH-TSH test.

As he states: "If results of both tests are negative but my clinical nose tells me that the picture suggests a biological condition, I may continue my search." His position appears to be that if all biological diagnostic tests are negative, then he would not use an antidepressant. He makes important statements regarding monitoring blood levels of antidepressant drugs as well as tracking treatment compliance. He also makes suggestions about altering treatment of those 15% who do not respond to the first antidepressant trial.

Of interest, is that without much real explanation, Gold tends to minimize the effectiveness and appropriateness of electroshock therapy (ECT). There is also a

discussion of treatment failures and causes for these. A chapter on the psychotherapy of depression focuses on cognitive therapy and interpersonal therapy. Gold concludes by pointing out several population groups that are quite vulnerable to depression — women, children and the elderly.

My personal reaction to the book was somewhat mixed. I found much of the information helpful but I was disturbed by the fact that while he presented his topic as one of a strictly scientific nature, many aspects that he discussed were anecdotal and when the literature was fully evaluated, not quite as clear-cut as he presented it.

This blurring of the "known" from the "thought-to-be" was easy for me to pick up, but caused me some concern in that the book was basically written for a lay person who would not be aware of the differences in the "certainty" of the information.

All in all, however, I would recommend it as worthwhile for patients and families of patients to read if they were given some of the above-noted caveats. My first choice, however, for that purpose (i.e. patient and family education) would be a book put out by the American Psychiatric Association Press titled *Depression and Its Treatment* by John H. Greist, MD. The latter book gives a much more balanced view of the different theories about depression as well as the various treatments available currently.

George D. Bussey, MD
Director of Adult Services
Kahi Mohala Hospital

Over the Editor's Desk

STEPHEN R.P.K. BRADY, MD

MENOPAUSE PUBLICATION IS AVAILABLE

Contrary to stereotypes about menopause, researchers find that most women have regrets about reaching this stage in life. Menopause is a natural process that takes place smoothly for most women and is accompanied by only mild (or even no) symptoms. For the few women with severe symptoms, treatments are available today to help relieve discomfort. Overall, during menopause women tend to be as healthy as they were before menopause and no more prone to illness.

The National Institute on Aging (NIA) has updated "The Menopause Time of Life" to answer common questions asked about menopause. This pamphlet includes descriptions of physical changes that occur during menopause and characteristic symptoms. Related topics cover treatment for menopause symptoms, use of estrogen, osteoporosis, nutrition, physical fitness, sexuality, and surgical procedures (hysterectomy and oophorectomy).

"The Menopause Time of Life" is intended for women of all ages and may be helpful to family members, health care providers, and the press.

To obtain your free copy, write to the NIA Information Center/Meno, 2209 Distribution Circle, Silver Spring, Md. 20910; or call 1-301-495-3455.

Multiple copies of the booklet can be purchased from the Government Printing Office for \$1 each. (Bulk orders of 100 or more will receive a 25% discount.) Please indicate stock number 017046-00056-0 on your order, and send a check or money order (VISA and MasterCard are also accepted) to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

SETBACKS SEEN IN WOMEN'S AND CHILDREN'S HEALTH—CHICAGO

Many American women and children may be on a "health care Titanic" due to changes in the financing and delivery of health care, in their socioeconomic status, and in demog-

graphics, according to an article in the Oct. 20 issue of *Hospitals* magazine. The article states that even in the 1970s, when many federal programs were at their highest funding levels in real terms, they reached only a fraction of needy women and children. Cutbacks since 1980 have further compromised the effectiveness of federal maternal and children's health programs.

The infant mortality rate, the "international benchmark of child health," is now stagnating in the United States after decreasing for decades; our infant mortality rate is now worse than that of 16 other nations, the article says. Moreover, the gap between infant mortality rates for blacks and whites appears to be widening.

Maternal health has suffered setbacks in recent years as well, in large part because of compromised access to prenatal care. For instance, the article reports that Medicare and Medicaid now cover only 43 percent of women of child-bearing age who have incomes below \$5,000, and only 31 percent of those with incomes of less than \$9,999, while an estimated 9.3 million American women between the ages of 15 and 44 have no public or private health insurance coverage.

The lack of health insurance coverage and the skyrocketing cost of malpractice insurance — particularly for obstetricians — have led to the emergence of another major problem for women's and children's health: The growing reluctance of physicians to deliver babies. The article reports that between 1983 and 1985, the number of physicians that had stopped practicing obstetrics went from 9% to 12%. Furthermore, 23% of obstetricians reported that by 1985, they had decreased the number of high-risk cases they took on — if, in fact, they were willing to take them at all.

For children who survive infancy, there are other health risks to face, the article points out. For instance, today, an estimated 60% of children between 1 and 4 years-of-age are immunized against most childhood disease compared to 90%

in 1979. Moreover, nearly one-third of all children under 17 have never been to a dentist, the incidence of infectious diseases in children is increasing, and more children are reported to have chronic diseases or conditions that limit activity and keep them out of school.

The article cites additional problems facing children including the growing number of pediatricians who are refusing to treat Medicaid patients and the shocking incidence of child abuse, fast becoming an epidemic.

The health of older women is also at risk due to lack of access to care and to changes in funding for health care. As many as 4 million women between the ages of 40 and 65 reportedly have no health insurance coverage, the article asserts. And, while Medicare is available to women over age 65, the article points out that the program does little for women who need long-term care. Women, in fact, comprise 80% of the nursing home population.

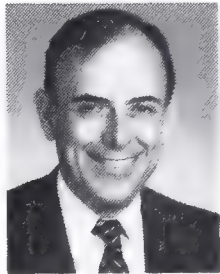
Future prospects for women's health appear to be dim. According to the article, "As self-employed, widowed, divorced, and never-married women become a larger percentage of the population, they will join high-risk and low-income mothers as potential victims of health care insurance and delivery systems that increasingly are mismatched to need."

The article concludes by suggesting that current policies regarding women's and children's health be replaced with policies that address long-range concerns, that stress preventive and timely care, and that view health care for women and children from the perspective of the total life cycle.

From the American Hospital Association, 840 N. Lake Shore Dr., Chicago, Ill.

NEUROLOGICAL SYMPTOMS IN AIDS PATIENTS MAY BE EARLIEST SIGN OF INFECTION WITH HUMAN IMMUNODEFICIENCY VIRUS (HIV)
—Scientists from Memorial Sloan-Ketter-

Why buy a computer system you have to perform surgery on just to use?



Leonard Mednick, CPA

Then why buy a computer system that is incomplete?

AURA Computers are assembled by our professionals as totally complete, turn-key, IBM-compatible systems, and for far less money than the competitors' advertised "specials" which are incomplete.

For Instance

AURA AT \$2399

1 Megabyte RAM
20 Megabyte Hard Disk
1.2 Megabyte Floppy
360 K Floppy
Color Monitor & Card

AURA XT \$1399

640 K RAM
20 Megabyte Hard Disk
1 360 K Floppy
Monochrome Monitor & Card

AURA PC \$1099

640 K RAM
2 Ea 360 K Floppys
Monochrome Monitor & Card

All systems carry a

FULL ONE YEAR PARTS & LABOR WARRANTY
(The big guys only offer 90 days!)

PLUS ONE WEEK MONEY BACK GUARANTEE

AND Many more STANDARD FEATURES!!!

Don't buy a system that you have to upgrade just to use

ing Cancer Center in New York City have reported evidence that a form of dementia may be the first or only early clinical manifestation of the human immunodeficiency virus (HIV) — the causative agent in AIDS — when some victims are first seen by a physician.

Physicians treating AIDS patients have recognized and described a progressive dementia often accompanied by changes in personality and difficulty in movement. These phenomena have been termed the AIDS dementia complex and are characterized predominantly by cognitive impairment, failure of muscular coordination, and personality change. Approximately 25 percent of the AIDS patients seen at Sloan-Kettering initially had neurological symptoms suggestive of the AIDS dementia complex with only a mild array of other physical symptoms related to AIDS. The authors contend that the AIDS dementia complex should be incorporated into the diagnostic definition of AIDS.

In reviewing the medical records of 112 patients with the AIDS dementia complex, the researchers identified 29 cases in which this syndrome developed before a

formal diagnosis of AIDS was established. Presence of HIV infection was confirmed in this group by the ultimate development of full-blown lethal AIDS or at autopsy. The earliest signs of the dementia are mental slowing with impaired memory and concentration. Most of those with AIDS dementia complex deteriorated within months to severe dementia, which left them bedridden, incontinent and unable to speak.

NEW AICR CALENDAR OFFERS TIPS TO LOWER CANCER RISK - If you have been looking for a year's worth of helpful hints on diet, nutrition and how they can relate to better health for your family, then a copy of the new American Institute for Cancer Research 1987 calendar, "A New Leaf," is what you need.

Although there is no charge for this special calendar, the Institute is requesting a donation, if possible, to help support its research and education programs. A copy of the calendar may be ordered by writing to the American Institute for Cancer Research, Dept. NL, Washington, D.C. 10069.

CLASSIFIED NOTICES

To place a Classified Notice call Margie at 521-0021.
4 line minimum, approximately 5 words per line.
Payment must accompany order.

NOTICES AND ANNOUNCEMENTS

WANTED: Responsible & committed physician to learn to do facial wrinkle injection treatments & leg spider vein treatments in very nice cosmetic surgery office located in central Honolulu. Pleasant personality/appearance and a steady hand needed. Gratifying, low stress, independent work with large and expanding referral base. Probable income at least \$200 per hour, part-time. All inquiries confidential. Call 941-1451.

SERVICES

TAGS

AUTO REGISTRATION SERVICE

No more standing in line.

- Registration Renewals
- Title Transfers
- Traffic Clearance
- Pick-up And Delivery
- And much more!

31 N. King St. Ph. 524-6791

BUSINESS OPPORTUNITIES

FOR SALE-established family practice island of Kauai. Fully equipped & staffed. Contact Dr. De Alday 1-338-1664 or write P.O. Box 849, Waimea, Hawaii 96796.

EMPLOYMENT OPPORTUNITIES

ISLAND FEVER?

Respected Internist desires to switch practices for a short time. Good salary. Good living conditions. Glen Deutsch MD, 410 Division St., Buffalo, MN 55313. (612) 682-3325

NEUROLOGIST

Board certified, part-time or full-time neurologist for EEG & EP imaging diagnostic clinic. Opportunity for participation. Call 545-3800.

FOR SALE

50% OFF PREVIOUSLY OWNED medical, laboratory, office, x-ray, ultrasound equipment. We buy, sell, broker, repair. Medical Equipment Resale, Inc. 24026 Haggerty Rd., Farmington Hills, MI 48018; 1-800-247-5826, (313) 477-6880.

OFFICES

Has parking been a problem for you and your clients? Call us today! We have the office space for you with ample free parking. Bobbie Martinsen (R) 521-0321 HAWAII MANAGEMENT CORP.



AURA
COMPUTER CO.

A division of Leonard Mednick CPA, part of the Small Biz Help Net

15th Floor, Pacific Tower / 1001 Bishop Street
Honolulu, Hawaii 96813 / (808) 536-7211, MODEM 533-0190

AURA Computers—Unbeaten for Quality, Price & Service

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA **Professional** **Relations** **Department**

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo)
	329-5291 (Kailua-Kona)

HMSA's Place of Treatment Program
saves your patients money.
Call us for details.

MEMO

TO: ALL DOCTORS

FROM: PEQEX

Do you need assistance in obtaining a specialty medical product?

Would you be interested in saving on quality medical and surgical products?

Are you planning to set up a medical office or clinic?

Let **PEQEX, Inc.** be your answer, Call 537-2724

Representing:

BEAVER • BURTON • DETECTO • PYMAH
CARING • DAVIS & GECK • MILTEX • PEDIGO
JOERNS • GRAHAM FIELD & MANY OTHER COMPANIES

PHYSICIANS EQUIPMENT EXCHANGE, INC.
PEQEX, INC.

(808) 537-2724

831 Pohukaina St., #C-3 Honolulu, Hawaii 96813



**Mitch wants to
make it on his
own when he
grows up . . .
With your help
he can do it.**

Mitch is like any other 8-year-old. He dreams of growing up, getting a good job, having friends, enjoying his community.

Mitch also has mental retardation. But today, that no longer has to put an end to any youngster's dreams.

Find out why. Contact your Association for Retarded Citizens. ARC is working to make Mitch's dreams come true. Join us. Help build better lives.

Help build the arc
Association for Retarded Citizens

NEWS & NOTES

(Continued from page 201)

1979 fee schedule. Earl Motooka, acting administrator of the DSSH Medical Care Assistance Div recommends a reimbursement formula of 100% of the 1979 fee schedule, an annual increase of \$6 million, more than half of which will be covered by Federal funds . . .

HMA spokesperson Becky Kendro says a \$12 million budget increase would allow physician fees to be raised to 60% of 1986 levels. "We're very aware that specialty care is becoming more difficult to obtain, primarily because of increased malpractice insurance . . ."

Conference Humor . . .

"I must be a mushroom . . . They keep me in the dark . . . And feed me bull — (From VP Eugene Bogymski's lecture on Gastroesophageal Reflux)

* * *

A man owned a pet shop. His mother's birthday was coming up, and he wanted to give her something extra nice. He had this \$1500 parrot which was fluent in five languages. So he packed it carefully in a cage and sent it to his mother in time for her birthday. After a week, he called her on the phone. "Mama . . . How did you like my birthday gift?" "Son! That was the most delicious bird we ever had . . ." "But Mama! That was my prize parrot who could speak in five languages!" "Well! Why didn't it speak up!" (The first printable joke told by our tennis playing friend, Clay Benham)

Bumper sticker: "If your doctor drives a Jaguar, get a second opinion.." (Heard on KHVH, Paul Harvey . . .)

Senior Citizen Beats Inflation (Submitted by Fred Reppun, our Editor in Chief)

A couple, aged 57, went to the doctor's office. The doctor asked: "What can I do for you?" The man said: "Will you please watch us have sexual intercourse?" The doctor looked puzzled, but agreed to do so. When the couple had finished, the doctor commented: "There is nothing wrong with the way you have intercourse," and he charged them \$16.00 for the office visit.

This happened several weeks in a row. The couple would make an appointment, have intercourse, pay the doctor in cash and then leave.

Finally, the doctor could contain his curiosity no longer. "Just exactly what are you trying to find out?" he asked.

The old man replied casually: "We're not trying to find out anything. She is married and we can't go to her house. I'm married, so we can't go to my house. ----- Inn charges \$60 for a room. The ----- hotel charges \$42. We do it here for \$16 and I get back \$12.80 from Medicare for a visit to the doctor's office."

MORAL: Should the doctor charge each participant \$16 for a total of \$32?

Elected, Honored
and Appointed . . .

Norman Goldstein, associate clinical professor of dermatology at U of H School of Medicine, was elected a fellow of the American Society of Lasers in Medicine and Surgery at its annual meeting in S.F. . . . Vernon Gray of Kapaau (West Hawaii) received his honorary fellowship degree from the International College of Cranio-Mandibular Orthopedics at a March 22 meeting in Honolulu . . . Vernon is an internationally acclaimed plastic and reconstructive surgeon from Los Angeles who recently retired here . . .

Ophthalmologist Gerald Faulkner was accepted as a chapter member of the American College of Eye Surgeons . . . Bob Weiner, immediate past president of the Kauai Unit of the American Cancer Society, was awarded the 1986 Honor Citation . . . Bob was being recognized for organizing the flexible sigmoidoscopy screening program, which several Kauai physicians perform without charge on persons over age 50 . . .

Miscellany

(Heard by our favorite MSD rep Claire Lee Nakatsuka)

"What goes up and never comes down?" "Age." (As told by Roland Tam)

Two avid golfers were having a serious discussion . . .

Bob: "Say, Larry, what if Heaven doesn't have any golf courses!"

Larry: "Let's promise each other . . . Whoever gets to Heaven first must come back and let the other know . . ."

Several weeks later, Larry died in an auto accident . . . He got to Heaven and, sure enough, there were beautiful golf courses everywhere he turned, and angels for caddies . . .

Larry went to St. Peter, related his pact with Bob and begged to be sent back to report to Bob . . . St. Peter was touched by the sincerity of their friendship . . .

Bob had just sunk his birdie putt on the 18th and his jaw dropped when Larry appeared . . .

Larry: "I have good and bad news."

Bob regained his composure and asked, "First, what's the good news?"

Larry: "Heaven has the greatest golf courses you ever saw and you don't have to wait in line like at the Ala Wai . . ."

"What's the bad news?"

"You have an 8 o'clock starting time this Friday." (As told by George Seberg) ☆ ☆ ☆

EDITORIALS

(Continued from page 183)

physicians in order to help them acquire CME credits at times when they are usually not busy.

It has taken us some time to follow-up on Alex's request for assistance, but we

Renewing your CD?
Talk to E.F. Hutton
about serious money
investments.

If you are interested in learning more about the facts and principles of investments aimed at preserving existing capital, fill out the coupon attached and we'll have an Account Executive give you a call. Or, if you prefer, call now for immediate action
521-2961.

2500 Pauahi Tower
1001 Bishop Street
Honolulu, HI 96813

**When E.F. Hutton talks,
people listen.**

☐ I want more information! Please have an Account Executive call me.

☐ I'm interested. Please send me more information.

Name _____

Address _____

City _____ State _____ Zip _____

Business Phone _____ Home Phone _____

EFH Acc't # _____

EFHutton

E.F. Hutton & Company Inc.
2500 Pauahi Tower
1001 Bishop Street
Honolulu, HI 96813

Member SIPC

If you do
business in
Hawaii . . .

and want to keep on top of civil cases in our courts, or tax liens, public hearings, incorporations and partnerships, or almost anything else of value in your practice

. . . we have
news for you



PACIFIC
BUSINESS
NEWS

For information call 521-0021.

NO TAXES. HIGH INCOME.

Now you can achieve these investment objectives in one professionally-managed, convenient package—the **Hawaiian Tax-Free Trust**.

Hawaiian Tax-Free Trust is a municipal bond mutual fund that is **locally managed** by Hawaiian Trust Company, Ltd. It is designed especially for residents of Hawaii. By investing primarily in Hawaii tax-free municipal securities, the Trust gives you the advantage of earning a high level of income which is **double tax free***—free of both State and Federal income taxes. Dividends are paid monthly or automatically reinvested.

And these big tax savings can be realized with an **initial investments of only \$1,000**, and no minimum for additional investments.

FOR INFORMATION

**Contact Your Local Investment Broker
OR CALL 1-800-228-4227**

Toll-Free From Hawaii, 7 days a week, 24 hours a day

Aquila Distributors, Inc., 200 Park Avenue New York, New York 10017



HAWAIIAN TAX-FREE TRUST

You will be sent free descriptive material and a prospectus containing more complete information including management fees and expenses. Read carefully before you invest or send money.

* Under certain circumstances, some income may be subject to state and federal tax. Share price and dividend rate are not fixed and vary with interest rate fluctuations.

now have responses from both Oceanic and Lifetime. Their explanations are published in the letters-to-the-editor column. We feel that many in the viewing audiences of television need to understand the why and whereabouts of programming.

The answer to Alex Roth, of course, lies in viewership. May we ask our physician readers to please call 536-7702, or write to the JOURNAL c/o HMA at 320 Ward Ave., Honolulu 96814, to indicate to us how many want Lifetime Medical Television back on the screen?

J.I. Frederick Reppun, MD
Editor

LETTERS

(Continued from page 183)

oriented services would be more valuable. Like other media services, however, Oceanic Cablevision is responsive to community needs and priorities.

We would very much appreciate your help in persuading Oceanic Cablevision to reinstate LIFETIME MEDICAL TELEVISION. A simple phone call or brief letter expressing your opinion to Oceanic Cablevision will assist us greatly. Oceanic Cablevision's phone number is 836-2888; their mailing address is 2669 Kilihaui Street, Honolulu, HI 96819.

LIFETIME MEDICAL TELEVISION is devoted to meeting physicians' continuing educational needs. We look forward to serving you and other physicians in the Honolulu area. We and our many collaborating medical organizations appreciate your help in gaining access to this unique medical resource.

Tom Rockwell, MD
President

Lifetime Medical Television

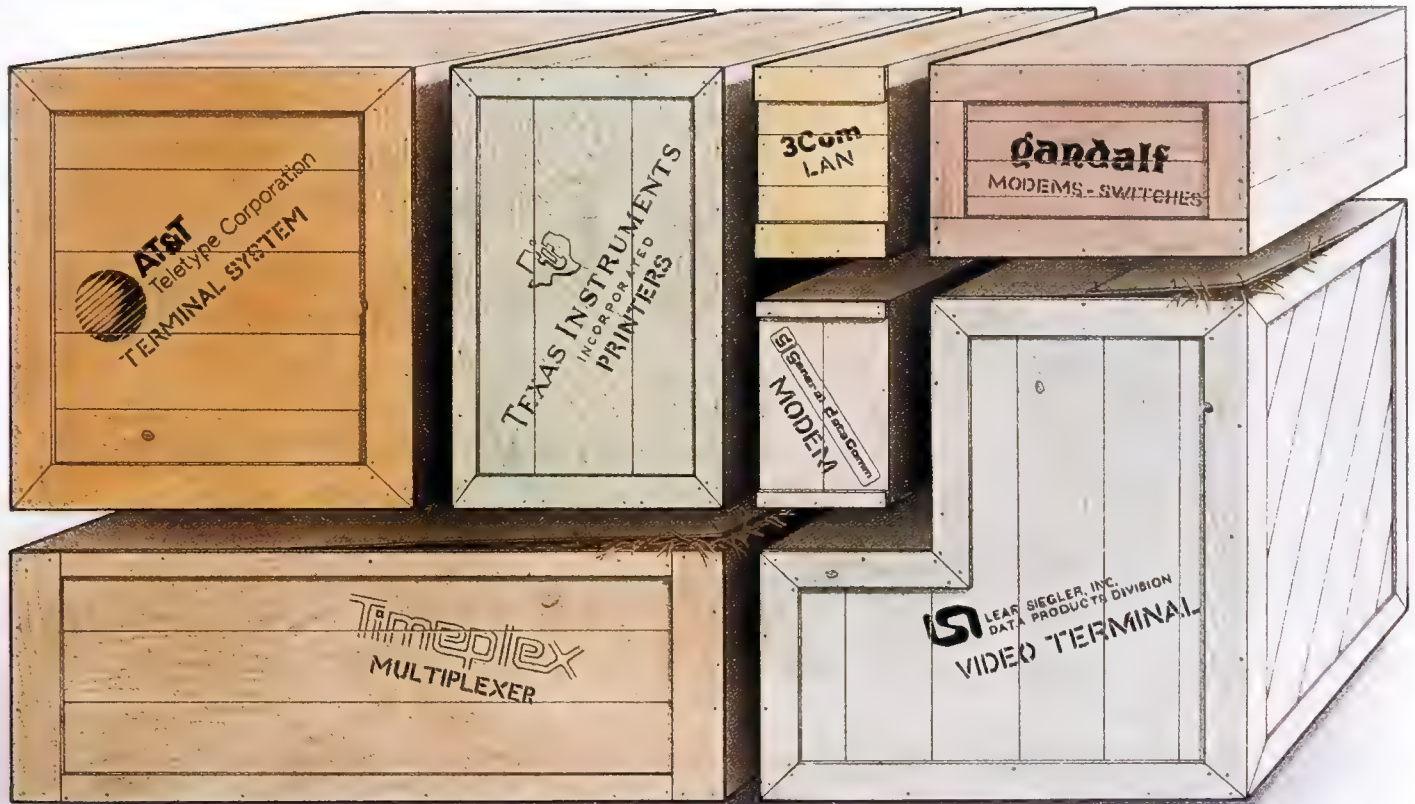
Re: Lifetime Channel

Thank you for your letter of April 11, 1987, in which you express interest in the medical programming produced by the Lifetime Channel.

Cable programming, like broadcast television programming, changes in response to subscriber preferences. Lifetime was discontinued from local cable service Oct. 5, 1986, for reasons of overall low viewership and to accommodate new programming services.

Cable television delivers a wide variety of programming to subscribers. Although we wish we could address the preferences of every special-interest

In The Data Business, Sometimes It's Better To Mix Than Match.



At Hawaiian Telephone, our data consultants have researched, planned and designed literally hundreds of data systems, large and small. Many times, we've found it more efficient to design a network by selecting state-of-the-art components from a variety of manufacturers. More economical, too.

And when it finally comes to purchasing, our loyalties are with you — not to any particular brand name.

Besides knowledge and experience that spans the entire telecommunications industry, Hawaiian Telephone offers one distinct advantage. We'll stand behind any data system we sell with a service staff unequaled in Hawaii.

When you're ready to select a data system, or upgrade the one you have, do two things.

Forget everything you know about shopping. And call Hawaiian Telephone Data Communications Group at 546-7842.



The Nomura Pacific Basin Fund
Rewards the
Discerning Investor

74.5%*
in 1986



That's right! In 1986 The Nomura Pacific Basin Fund placed *third* in performance among 1,117 monitored mutual funds** — *second* among international funds.

And, since its inception in July, 1985 the Fund has returned 116.0% to investors.

And now:

- *Minimum initial investment reduced to \$10,000*
- *No sales or redemption charges*
- *Experienced proven professional management*
- Call (808) 538-3837
Persons-in-charge
Russell Oki or Sharon Kaya

* Total return for the period January 1, 1986-December 31, 1986, based on change in share price, reinvestment of dividends and capital gains distributions. Favorable currency exchange rates during this period contributed significantly to the total return. Past performance is no guarantee of future results.

** Lipper Analytical Services, Inc., a well known fund rating service.

For more complete information about the Fund, including charges and expenses, call the above number or mail the coupon for a free prospectus. Read it carefully before you invest or send money. Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.



NOMURA SECURITIES INTERNATIONAL, INC.

Honolulu Office: (808) 538-3837

Persons in Charge: Russell Oki & Sharon Kaya

1001 Bishop Street, Pacific Tower, Suite 2760, Honolulu, HI 96813

Name _____

Address _____

City _____ State _____ Zip _____

Business phone () _____ Home phone () _____

Copies of the prospectus may be obtained in any State from securities dealers who may legally offer these Securities in compliance with the securities laws of such State.

Member SIPC

PBN

group, our capabilities are limited by time and system capacity.

I will keep your letter in my file and forward a copy to our Programming Department. We value your input and will not forget your suggestion.

Jeff Smith
Vice President, Marketing
Oceanic Cable

PHYSICIAN IN SOCIETY

(Continued from page 188)

Americans but who wanted to have their claims for their lands legitimized and the lands returned because "they were cheated" 100 years ago, was only a momentary fizzle of a minifirecracker. Prof. Blaisdell extinguished it beautifully when he came down from the podium and he and Sabin embraced.

Sabin's reference to expanding the concept of "America" was not to imply a take-over by force of the rest of the world. Far from it! He voiced what I had said in Auckland, New Zealand, the month before, as did many others at the Asian-Pacific IPPNW Regional Symposium: "Let's work for 'global' security rather than 'national' securities." We had assembled there, 15 nations represented by 272 delegates, to propose "preventing" a nuclear war, rather than, as the American Administration seems determined to plan to do, to fight a nuclear war, win it and survive it.

One does not approach the threat of either nuclear war or of AIDS that way, except irrationally! Prevention, rather than treatment, much less cure, is the way to go in order for the human race to survive either of these potential holocausts.

As a matter of fact, we were to come up shocked, as the E P & M H Conference continued into the third and fourth mornings. Despite Sabin's contention, oft expressed, that AIDS might well go the way of all prior epidemics, we were assured by the faculty that there could possibly be no way to develop a drug treatment or a vaccine prophylaxis for AIDS. The HIV is unique beyond belief.

After Volberding gave us "all there was to know about AIDS" to date, Osborn outlined a scenario of the future. Analogies with the threat of a nuclear war continued to pop up.

Just as it is totally logical that to quit smoking is far superior to any effort to develop a "safe" cigarette, so it is with AIDS. It is very unlikely that a drug can be developed that will kill the HIV without at the same time murdering the host, because the retrovirus surreptitiously sneaks into the DNA & RNA of each cell; it is thus able to destroy the immune

Shopping for a new telephone system? Haven't called Harris Lanier Hawaii? YOU DON'T KNOW WHAT YOU'RE MISSING!

Advanced. Affordable. Backed by unparalleled Service and Support. Business Telephone Systems Without the Usual Hangups from Harris Lanier Hawaii. Offering a full line of the latest in office communications at prices you can afford. We customize every system according to your needs.

Call us today at 536-7751 for a no obligation evaluation.



HARRIS



HAWAII



*Did
you
know?*

Did you know that Saint Francis Medical Center is now a surgical leader?

The only one doing organ transplants, both kidney and bone marrow, and a leader in laser surgery.



**Saint Francis
Medical Center**

Discover the Difference



leas·able

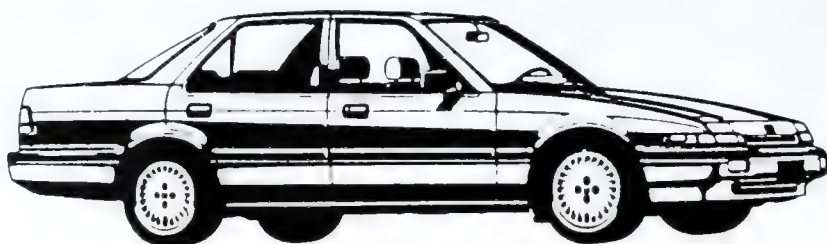
(le-sa-b 'l), *adj.*

1. ability to drive more car for less money
2. opportunity to save or invest your down payment instead of putting it into a car
3. ability to benefit from the new tax laws
4. an affordable way to finance a new Honda 4 dr Accord LX with automatic transmission

\$227.00

PER MONTH PLUS TAX

Model CA563: 1st payment, security deposit and license fee delivers your car.
60 month closed end lease.

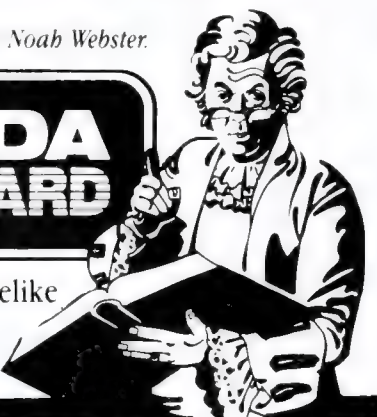


Choose from stock or order one of your choice for the same Monthly Payment.

A Word to the wise from Noah Webster.



in Kaneohe near Likelike
and Kam Highways
Telephone 247-8544



Honolulu Orthopedic Supply

ORTHOTICS
PROSTHETICS
MASTECTOMY FITTINGS
ORTHOPEDIC SHOES
WHEELCHAIRS
WALKING AIDS

536-6661

1365 Nuuanu Avenue • Honolulu, Hawaii 96817

system of the human body, leaving it helpless to defend itself against invaders bacterial, viral or malignant. For that reason it is also unlikely that a vaccine can be developed; the enemy is in the cell rather than on it or in the humoral substrate. This leaves "Behavior Modification," i.e. prevention, as just about the only recourse left to us in order to thwart the progression of the epidemic.

So it is with nuclear war. We physicians know — and we need to teach our patients, the general public — that there is no treatment for radiation sickness. Therefore, behavior modification at the leadership level of all nations is of paramount importance in avoiding that holocaust. There is likely to be no survival in a meaningful sense of social survival. Therefore, we must PREVENT it, that which might well become the ultimate, the final epidemic.

The public's latching on to the glimmer of hope provided by AZT as treatment, plus the hope of a preventive vaccine being developed, thus detracting from efforts to change behavior, is also analogous to the Administration's FEMA threatening to withhold federal funds from municipalities and states that refuse to include planning for disaster in the event of a nuclear war. FEMA's effort is related to the Administration's intent not only to be able to fight a nuclear war, but also to win and to survive one. This detracts from efforts to PREVENT a nuclear war.

Osborn brought SDI into the picture anent AIDS, and tied it right down to what the other speakers had alluded to, namely that basic non-specific research with only vague objectives has often come up with some remarkable discoveries. Penicillin comes to mind once again. She emphasized that the Administration's Strategic Defense Initiative, otherwise known as Star Wars because it projects nuclear warfare into space, has already drained off some of the best scientific minds and facilities, as well as the dollars, away from such promising pure research.

PSR's newly elected president, Victor Sidel MD of New York, has long been proposing that "Destruction without Detonation" i.e., before detonation, is already damaging our society as a result of the long-time military economy. Seymour Melman, Professor of Engineering at Columbia University, spoke in Honolulu several times the week before E P & M H. His fervent plea was to reverse the arms race by conversion to a civilian economy before America dropped even further down in the list; it is now a

Any lender can help get your home improvement project started.



An AdvanceLineSM can help your home reach its full potential.

You know how home improvement projects go. First, the kitchen, then the bath, then a pool, then landscaping. And each time you find yourself trekking down to a bank for another home improvement loan. Not with an AdvanceLine from First Interstate Bank.

One trip and your AdvanceLine will see you through project after project. Year after year. AdvanceLine is a revolving personal line of credit, much like a super charge card. As you repay, you actually rebuild available credit for future use.

An AdvanceLine can be established right up to \$250,000, depending on how much equity you have and, of course, your ability to repay.

The interest rate is based on the average 91-day Treasury Bill rate during the prior calendar quarter, so you're always paying a fair, current market rate.

But perhaps most important, since your AdvanceLine is secured by home equity, you qualify for full interest expense deductibility under the Tax Reform Act of 1986 and your AdvanceLine is not limited to just home improvement use.

You can use your AdvanceLine for tuition payments, taxes, major purchases, investments or even paying off other, more expensive loans and charges.

For more information about AdvanceLine, stop in at any branch or call the Consumer Loan Center at 525-8290. Let us help you get the full potential out of your home.



An equal housing, equal opportunity lender. Member FDIC.





O.P.T.I.O.N. Care of Hawaii
A Home IV and Nutritional Service

PRESCRIBE INTRAVENOUS HOME CARE!

If hospitalization is not absolutely necessary, let O.P.T.I.O.N. Care's experienced I.V. team assist you in providing your patients with a successful home therapy. O.P.T.I.O.N. Care's full-service program ensures cost-effective therapy and satisfied patients.

JOIN THE LEADERS . . .
PRESCRIBE O.P.T.I.O.N. CARE.

WE HAVE THE SOLUTION FOR YOU®

For More Information **CALL 254-5841**

Pali Palms • 970 N. Kalaheo Ave., Suite C-106 • Kailua, Hawaii 96734

TURN HEADS



The AMG Mercedes Benz: a machine of heroic capabilities . . . designed to reward the discriminating driver who claims the horizon as personal property.

We're proud to announce the exclusive line of AMG Body Styling Kits, wheels and accessories for Mercedes Benz. AMG devotes 100% of its engineering genius to the development of exclusive modifications and conversions for the remarkable Mercedes Benz automobile. At Magnum Motorsport, we can customize your Mercedes, better your BMW, or accessorize almost any car, including VW, Honda, Toyota, Datsun and Mazda.

Call for FREE brochure and more information.

777 Kapiolani Blvd.
537-3975

MAGNUM
MOTORSPORT
INTERNATIONAL MOTORING ACCESSORIES

secondrate industrial power. It becomes obvious, therefore, that the lack of allocation of funds to fight the AIDS epidemic is on a track parallel to the one that does NOT seriously lead to disarmament. As Osborn put it so well: "We want equal time, for education against AIDS, equal to that given for military recruitment (to which I would add: And also for the prevention of nuclear war!)."

To conclude: Physicians and their paramedical colleagues are in the forefront of the struggles against poverty, malnutrition, epidemics and pandemics of disease, overpopulation, AIDS and nuclear war.

Our profession transcends geo-political boundaries — just as Chernobyl's fall-out alerted people to the impossibility of containing within man-made boundaries the catastrophes that are global in impact (Please note that such political boundaries are not visible from the moon!). AIDS too has become a global problem; international efforts to control and to prevent its widening impact are already in place. So must it be with the threat of nuclear war. We need worldwide collaborative efforts in order to assure "global security." "National security" has no meaning in the face of AIDS and nuclear war. Modern communication via satellites in space, modern transportation at supersonic speeds through space, all make for "one world."

As Albert Sabin pleaded: "Let's make the Mana — the Force & Spirit — of the Founding Fathers of America encompass the world." We workers for the preservation and protection of humanity on planet Earth need to be in the vanguard of this "new way of thinking."

Through organizing and implementing *Epidemics, Pandemics and Mass Hysteria: From Antiquity to AIDS* and so successfully teaching us who were fortunate enough to attend that such catastrophes must be approached with attention to the sensitivity of human beings, as well as to their "rights"; that prevention as the result of education and learning is so much more effective than trying to remedy and treat afterwards, Kauai, the progenitor of the Separate Kingdom, has shown us the way to deal with both AIDS and the threat of nuclear war.

J.I. Frederick Reppun MD**

* Presented to the Medical Staff of G.N. Wilcox Hospital, Lihue, Kauai on 30 March 1987

** Editor, Hawaii Medical Journal and Coordinator, PSR/Hawaii

Landlord Loans.

Here's a unique **creditline** for people who own rental property.

First Hawaiian Creditcorp offers you more than an attractive home equity creditline. We also offer a special creditline based on equity in property you rent to others.

That can be very useful. For home improvements. Lease to fee conversion. Investment in other properties. You can probably think of many other good uses for a creditline, from \$10,000 to \$250,000, available whenever you need it.

The interest rate is just 3% over the prime rate, floating, and your monthly payment is based on an interest-only computation. This way you decide when to make principal payments. Given the current prime rate of 7.75%, a fully drawn creditline of \$25,000 would require a payment of only \$223.96 per month (effective APR 10.75%).

And, for qualified borrowers there are **no loan fees**.

Approval is fast and direct. You bypass the front line and talk directly to the Manager of your local branch. Their names and numbers are listed below.

Call today. We think landlords deserve a lot of credit.



First Hawaiian Creditcorp, Inc.

We say yes to you, too.

(A financial services company of First Hawaiian, Inc.)

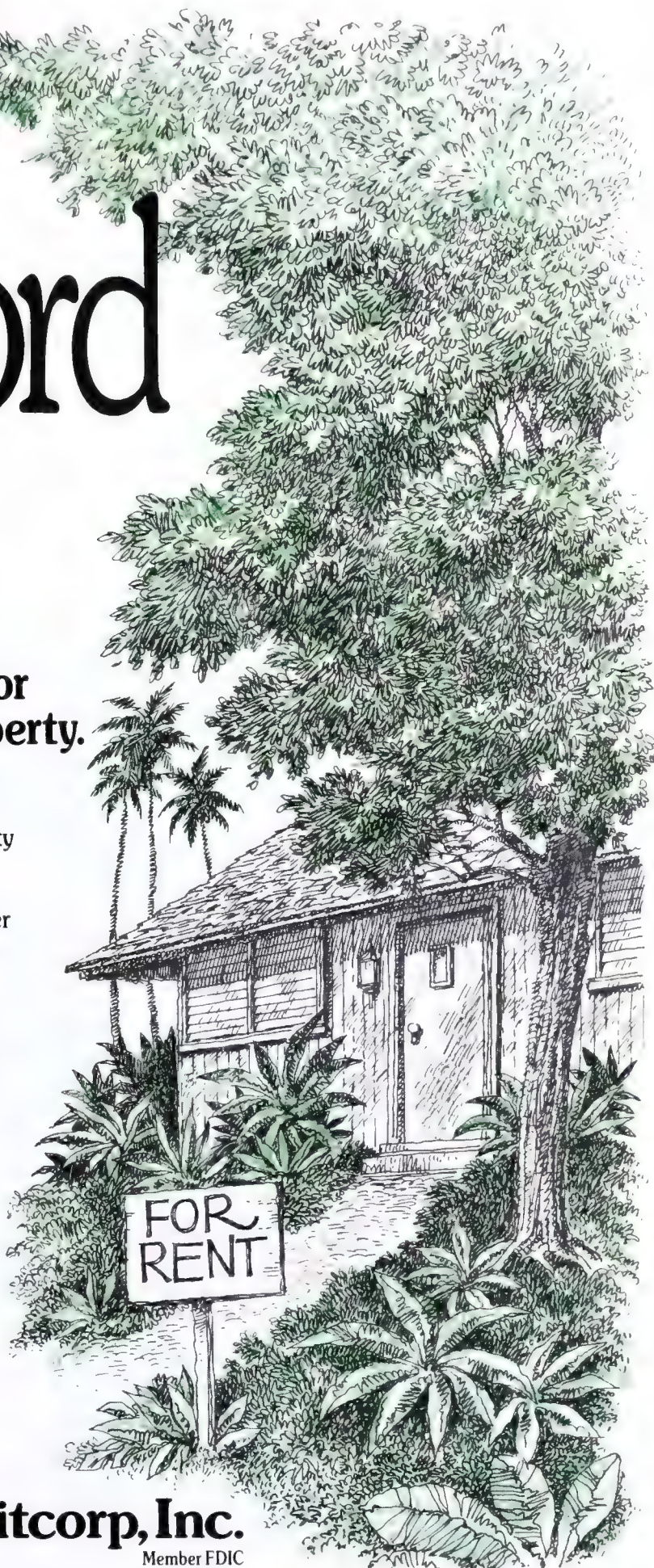
Member FDIC

- **Downtown:** Wesley Young, 538-6781
- **Keeaumoku:** Harry Hayakawa, 946-9555
- **Kailua:** Arthur Wong, 261-3341
- **Kaneohe:** Delbert Kamikawa, 235-8771

- **Kahala:** John Nielsen, 732-6641
- **Moanalua:** Dexter Ling, 839-1961
- **Waipahu:** Dave Tsukayama, 677-0751
- **Pearl City:** Adrian Lau, 488-7735

- **Mau:** Betsy Tadaki, 877-3918
- **Kona:** Clyde Kutsunai, 329-7741
- **Hilo:** Ellsworth Seto, 935-0848
- **Kauai:** Brian Yamase, 245-3945

Rates and terms subject to change without notice



Your dream vacation could be as close as the nearest First Hawaiian Bank. Because when you ask for MasterCard Travelers Cheques between June 1 and September 11, your teller will give you a contest entry blank.

The Grand Prize is a 17-day Australian Adventure or a 7-night Alaskan Cruise. And you'll be taking along \$1,500 in MasterCard Travelers Cheques, too.

Plus, there are over 890 other great prizes being awarded.

MasterCard Travelers Cheques are only available at First Hawaiian. And they're as good as gold in over 100 countries around the world. So if you're going on a trip, be sure to carry MasterCard Travelers Cheques.

Ask for
MasterCard®
Travelers Cheques,
and you could be
off to Australia
or Alaska.
For free.

Enter the MasterCard Travelers Cheques Sweepstakes at any First Hawaiian branch.

See entry blank for official rules. No purchase necessary to enter or win. Must be 18 or older to enter.



FIRST HAWAIIAN BANK
We say yes to you.

Member FDIC



JULY 1987
VOL. 46, NO. 7

Hawaii Medical Journal

CONTENTS

FROM THE PRESIDENT	222
Walter W.Y. Chang, MD	
EDITORIAL:	224
Premies	
J.I. Frederick Reppun, MD	
LETTERS TO THE EDITOR RE:	224
High School Athletics	
Maxwell A. Cooper, MD	
A Personal Account	
Pamela McKenna, MD	
FROM THE DIRECTOR OF HEALTH	227
John C. Lewin, MD	
"LE MOT JUSTE"	228
Harry L. Arnold Jr., MD	
CONTINUING MEDICAL EDUCATION	231
INSTRUCTIONS TO HMJ AUTHORS	232
PREMATURES ENTER SCHOOL:	235
A FOLLOW-UP STUDY	
Mary S. Sheridan, PhD, ACSW	
BEHAVIORAL TREATMENT OF	238
PALMAR HYPERHIDROSIS	
William T. Stuchima, PhD	
Roman W. Glamb, MD	
Dawn B. Pang, PhD	
THE CATALYST MODEL	260
J.I. Frederick Reppun, MD	
THIS IS MY MANA'O	263
J.I. Frederick Reppun, MD	
NEWS & NOTES	266
Henry Yokoyama, MD	
OVER THE EDITOR'S DESK	272
Stephen R.P.K. Brady, MD	

HAWAII MEDICAL JOURNAL
UCSF LIBRARY
RECEIVED ON: 07-21 87



UCSF LIBRARY
SERIALS DEPT
257 MED SCIENCES BLDG
SAN FRAN, CA 94143-0840

BUY vs. LEASE? LET THE BUYER BEWARE.



Beware the hidden costs when investing in new capital equipment.

Buying ties up your cash and your hands. Subjects your company to inflation and risk. And leaves you open to paying too much for your new equipment.

Commercial Leasing avoids the penalties of buying.

Leasing conserves capital and improves your cash flow. In a lease, you need little or no down payment. A lease provides 100% financing, which can include delivery, installation, taxes and progress payments. You keep your cash for working capital, investments, expansion or other vital uses. Nor, must you raise new capital

to obtain needed equipment.

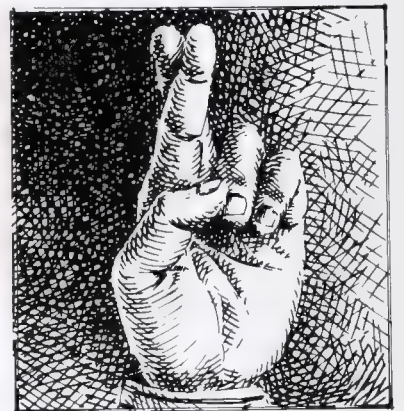
Leasing is a hedge against inflation and risk. You pay for today's equipment with tomorrow's cheaper dollars. Also leasing protects you from the risk of obsolescence. You're never stuck with inefficient, outdated equipment. Or paying for it!

Leasing brings down the cost of equipment. Bancorp Leasing

rental payments are often significantly less than standard loan payments. And, now, with 1986 tax reform eliminating the investment tax credit, changing depreciation rules, and the new Alternative Minimum Tax, leasing may lower the tax bite. Further, you may be able to expense the entire amount of your payments for tax purposes, reducing your tax liability more.

You need the use of equipment now, not ownership in the future. Learn the actual dollar savings of leasing vs. buying from the experts in the largest equipment leasing company

in Hawaii. Allied with Hawaii's largest bank, Bank of Hawaii. (So if a Bank of Hawaii loan is better or cheaper, we'll tell you that, too.) You have nothing to lose and everything to gain. Call 537-8812. No obligation. Avoid the pitfalls of investing in capital equipment. You can with Bancorp Leasing.



Bancorp Leasing of Hawaii

A subsidiary of Bancorp Hawaii

(USPS 237-640)

Published Monthly for the

HAWAII MEDICAL ASSOCIATION

(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814

Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD

Founding Editor: HARRY L. ARNOLD JR., MD

News Editor: HENRY N. YOKOYAMA, MD

Assistant Editor and Book Review Editor:

DOUGLAS G. MASSEY, MD

Contributing Editors: STEPHEN R.P.K. BRADY, MD,

FRANCIS H. FUKUNAGA, MD,

CHARLES S. JUDD, JR., MD,

Managing Editor: CHARLOTTE BEAL

Editorial Assistants: BECKY KENDRO,

JUDI KINGREY

Copy Editor: GWENDOLYN CHANG HULLEMAN

Graphic Artist: J. CHARLES DAVIS

Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,

THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,

JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD

(Commissioner)

HENRY N. YOKOYAMA, MD

(Chairman)

STEPHEN R.P.K. BRADY, MD,

NATHANIEL P.H. CHING, MD,

FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,

JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,

JAMES P. MCGUIRE, MD,

DAMKERNG PATHOMVANICH, MD,

ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,

J.I. FREDERICK REPPUN, MD,

TERRY C.Y. WONG, MD,

SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD

President-Elect: JAMES LUMENG, MD

Past President: RUSSELL T. STODD, MD

Secretary: JOHN H.C. KIM, MD

Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD

Honolulu: JOHN T. McDONNELL, MD

Kauai: THOMAS GROLLMAN, MD

Maui: HELEN S. PERCY, MD

West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD

CALVIN C.M. KAM, MD

Alternate Delegates to AMA

WALTER W.Y. CHANG, MD

RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.

Post Office Box 833

Honolulu, Hawaii 96808

Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.

16 Bruce Park Avenue

Greenwich, Connecticut 06830

Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.

"NOW, DRIVING IS ACTUALLY FUN... even in the combat zones of Honolulu traffic!"



Stanley Yamashita with his 1987 Celica Convertible

TOYOTA CELICA CONVERTIBLE

"I saw it at the auto show and decided on the spot that I had to have it.

There it was, going round and round on a turntable, at the end of an uninspiring stroll through all the other exhibits. I knew I was through with Porsches but I didn't know what I wanted until this stunning number caught my jaded eye — sleek, with clean styling and even a hint of elegance. All within my price range, too.

Although I was buying on looks alone, this car is no wimp. It glides on the streets, romps merrily up a hill, cruises blithely around the island and can be ferocious on the freeway.

I haven't enjoyed driving like this for years — and, in fact, used to make every effort to avoid the loathsome task.

But now, with this winner, it's actually fun — yeah, even in the combat zones of Honolulu traffic. You know, I even make that dreaded trip into Waikiki again?"



Stanley Yamashita

"This car is really a honey...A shape that was born to be convertibilized...Performance that is pleasantly surprising...All of this is worth every penny."

MOTOR TREND, May 1987

So before you buy your next car, test drive the most trouble-free car make in America*. The top four most trouble free were TOYOTAs. Six of the top ten were TOYOTAs. It's no wonder why TOYOTA ranked #1. That's why over 1,000,000 Americans bought new TOYOTA cars and trucks in 1986**.

*Based on problems encountered in the first 90 days of ownership

— J.D. Power & Assoc. 1985 New Car Initial Quality Survey.

**Wards Automotive Reports calendar 1986.

VISIT YOUR TOYOTA DEALER TODAY!

• KAILUA TOYOTA

Kailua Ph. 261-3321

• KAIMUKI TOYOTA

Kaimuki Ph 735-1737

• TOYOTA CITY

Moanalua Ph. 834-140C

• KAUAI TOYOTA

Lihue Ph 245-6978

• WAIPAHU TOYOTA

Waipahu Ph 677-3161

• WAHIAWA TOYOTA

Wahiawa Ph 622-4195

• WINDWARD TOYOTA

Kaneohe Ph 235-0068

• MOTOR IMPORTS

650 Kapiolani Ph 526-2688

DIVISIONS OF SERVCO PACIFIC INC.





FROM THE PRESIDENT

Hazards of Cigarette Smoking

"A Smoke-Free Society by Year 2000" is the goal of both the U.S. Surgeon General, C. Everett Koop, MD, and the American Medical Association.

The facts are sobering and revealing:

- Each year almost 350,000 Americans die before their time from cigarette-smoking effects.
- Smoking is a major causal factor in (1) emphysema, (2) chronic bronchitis, (3) lung cancer, and (4) coronary artery disease.
- Heavy smokers have a 10 times increased chance of getting lung cancer and 30 times increased risk of death caused by chronic obstructive lung disease.
- Thirty percent of all coronary artery disease deaths are cigarette-smoking related.
- Smokers lose about 88 million workdays annually.
- Roughly \$38 billion is the annual cost of deleterious smok-

ing effects, 13 billion of which are direct health care costs and 2.5 billion from lost productivity and wages.

- Passive secondary smoke inhalation by persons can cause up to 5,000 deaths annually.
- Smoking during pregnancy can result in an increase of still-births, spontaneous abortions and low birth-weight babies.
- The Legislature recently passed bills that are awaiting Gov. John Waihee's signature to be enacted into law that would prohibit sale of tobacco products to those under 18 and regulate smoking in the workplace as well as in public places.

As physicians, we are also patient advocates and need to encourage and strive to help our patients, staff and fellow physicians who are smokers, to stop. Only through concerned efforts of all concerned can we hope to eliminate this "Public Health Enemy No. 1."

Walter W.Y. Chang, MD
President
Hawaii Medical Association

**Facts about today's
corporate environment.**



Your survival depends on the financial direction you take today.

So you need a bank with the skill and commitment to help you manage your cash. One with a full array of advanced business services tailored to your needs.

First Interstate Bank.

While today some banks are cutting back services, we are not. So we can commit to helping you operate more efficiently now and in the future with a broad range of credit and non-credit products.

First Interstate products and services are backed by the unique strengths of the First Interstate system and are used by 70 of the Fortune 100. First Interstate has over 1,100 full-service banking offices in 18 states, and international banking offices in 22 foreign countries.

We can tailor products to your specific needs: wholesale lock box, CashLink[™] controlled disbursement, comprehensive payroll systems and automated accounting and reporting services.

In addition, First Interstate provides innovative financing techniques for the short-term or long-

term, revolving lines, stand-by lines, inventory and equipment financing as well as commercial mortgage financing for office improvement or project development.

Get a clear financial direction from the single source for all your business banking needs. Call the Business Banking Group of First Interstate Bank of Hawaii at 525-6820 today.

 **First
Interstate
Bank**

Member FDIC



Premies

In this issue of the JOURNAL is an article containing a preliminary study of the outcome, insofar as learning ability is concerned, in children who have survived the rigors of severe prematurity with all its attendant complications and threats to life and function. The research and writing was done by social worker Mary Sheridan, PhD, of Kapiolani Medical Center for Women and Children. We commend her for tackling the problem and feel that it will be of more than passing interest to our readers.

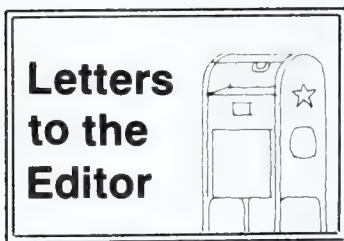
We have often wondered whether the huge amount of time, effort and human emotional energy expended by parents and by staff in and about the pediatric intensive care units results in the

survival of a person who becomes either a credit to the society of man, or a lifelong liability.

This brief, small and very preliminary study seems to provide a favorable answer to the question. Not the least of considerations in addressing this huge effort to save a premie's life, in this day and age of governmental concern over the costs of medical and health care, is the thousands of dollars expended in each case.

A more intensive and sophisticated research project on such children, clear up through high school, seems warranted.

J.I. Frederick Reppun, MD
Editor



RE: High School Athletics

I read with interest the April '87 issue article "Athletic Trainer Fields Public Awarenesses to Preventive Medicine in Sports." Pete Howard, athletic trainer at Punahou, richly deserves our kudos.

I'm writing to suggest another way in which unnecessary high-school injuries can be prevented and the beneficial aspects of high-school athletics can be promoted by us, the physicians of Hawaii.

Junior varsity and varsity-level athletics foster a keen competition with aggressive play among young athletes who, for the first time, are large enough to really inflict serious injury upon one another. A key factor in the degree of aggressive play I've observed over the years in high-school athletics is the "tightness" of the officiating.

I usually make a point of going on the field after a cleanly called and played event to congratulate the referees on their performance. I have seen injuries that resulted from aggressive and even unsportsmanlike play that was ignored by referees. That sort of play can quickly escalate in a game situation, teaches players that any infractions they can "get away with" are acceptable and detracts from enjoyment in the game by players and spectators alike.

We physicians should collectively and individually support and insist on good officiating.

Maxwell A. Cooper, MD

RE: A Personal Account

I am prompted by your editorial in praise of nurses (HMJ Vol. 46 No. 4 pp 115-116) to write and agree wholeheartedly with your assessment of the value of TLC in healing.

As physicians, we so often manifest (and convey to our patients, staff and families) a remarkable hubris — as if an exam, brief history and our scribbled orders are what cure our patients.

Having recently experienced the patient-doctor relationship from the patient's side myself because of a ruptured ectopic pregnancy, I was *very* impressed with the way in which the small, thoughtful actions of the nursing staff made me well. Certainly the opiates and painkillers were useful, but the emotional healing from a kind word, an extra pillow, a just-right hotpack were every bit as important.

My surgeon cured the surgical condition, but it's those nurses who make a person feel *well*!

I would never want to wish such a catastrophe as I had onto another physician, but it certainly would be an eye-opener and a mind-opener for any physician to have to live through an experience that many of our patients go through.

I look forward to reading the Hawaii Medical Journal.

Pamela McKenna, MD
Kahuku Family Health Center

AT LAST.

A cure for the high cost of medical malpractice coverage.



Our 350 physician-members agree that PIP has decreased their annual medical malpractice costs up to 75 percent.

Let us help you with your medical malpractice concerns. Contact us today for more information. It's good to have a choice . . . It's great to make the right one.

The Hawaii Association of Physicians for Indemnification (HAPI) offers a doctor owned, tax-deductible malpractice protection plan to qualified physicians and surgeons practicing in the state of Hawaii.

HAPI's Physicians' Indemnity Plan (PIP) can provide you with \$1,000,000 of medical malpractice coverage.

Norman J. Slaustas
Administrator, HAPI and PIP
735 Bishop Street, Suite 311
Honolulu, Hawaii 96813
(808) 538-1908

PIP
Physicians' Indemnity Plan
HAPI
Hawaii Association of
Physicians for Indemnification





Our most sophisticated business phone system has a sizeable advantage.

SELEX is our most innovative phone system ever. It lets you choose from up to 100 advanced features for transmitting voice and data. You can forward calls. Transfer them. Or route them through the least expensive carrier. You can add or drop features as you wish. And pick up new features as they become available in the future. All with the phone system that takes up less space than this page.

You see, the equipment that makes SELEX possible stays at Hawaiian Tel.

So all you need is a jack and a phone. And since the equipment stays with us, we can monitor it 24 hours a day. And fix problems before you're ever affected. (We even have a back-up power system.)

With SELEX your initial capital outlay is low since you're not paying for a bunch of machinery. (You may need to purchase phones designed especially for SELEX, in which case financing is available.)

SELEX is ideal whether you have two phone lines or hundreds of them.

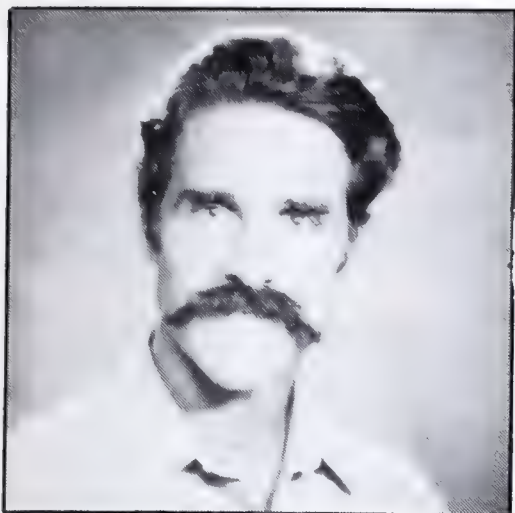
It's the worry-free phone system that never becomes obsolete. That doesn't require a lot of money. And certainly doesn't require a lot of space.

Find out more. Call us now at 46-S-E-L-E-X.

SELEX Business
Network

HAWAIIAN TEL **GTE**

Beyond the call



FROM THE DIRECTOR OF HEALTH

Toxic Substances and Risk Management

As interest in environmental health increases, information regarding toxic substances in the environment and impact on human health will become increasingly important to physicians in medical practice.

Hawaii is fortunate to have the leadership of Dr. Steven Moser of Maui, who chairs the Toxic Agents Subcommittee of the Hawaii Medical Association. His committee will need the support from physicians statewide if it is to be effective in terms of increasing awareness and taking responsible action with respect to toxic substances in the environment.

Pesticide residues in the environment are of particular concern to Dr. Moser and to the Department of Health at the present time. The herbicide atrazine, for example, considered to be essential by the sugar growers of Hawaii, has been detected in trace amounts in various groundwater systems on all islands where sugar is grown.

The U.S. Environmental Protection Agency (EPA) considers atrazine to be a "possible" human carcinogen, based on animal studies, and there is still a great deal of national debate about its safety. Therefore, the Department of Health is sponsoring a series of public informational meetings to air the views of the EPA, Department of Health, Department of Agriculture, and the sugar industry in anticipation of establishing an "interim action level" for atrazine in drinking water.

The use of heptachlor and chlordane as termiticides in Hawaii is also being re-evaluated. Hawaii is one of a handful of states that annually suffers multimillion-dollar losses from structural damage caused by the ground termite. For over 30 years, cyclodiene pesticides (chlordane, heptachlor, aldrin and dieldrin) have been used to control this pest in Hawaii.

However, these pesticides persist in the environment, have a potential to bio-accumulate, and cause chronic adverse health effects. Indeed, the majority of cyclodiene pesticides were banned in the late 1960s and early 1970s because of adverse environmental impact.

In Hawaii, both chlordane and heptachlor are still allowed for ground termite control. Recent data currently being reviewed by the EPA indicates that exposure to residual chlordane and

heptachlor in "properly" treated homes in the Eastern U.S. is considerably higher than anticipated. Indeed, preliminary reports indicate corresponding excess cancer risks as high as approximately three per 1,000 persons exposed, using estimates based on animal studies. This level of risk is unacceptable, even considering the benefits of continued use.

Today, cyclodiene pesticide residues or metabolites can be detected in the tissues of virtually every resident in the state, largely as a result of incredible improvements in analytical techniques.

Chlordane and heptachlor have been detected in sediments from areas subject to run off, and relatively high levels have been found in various species of fish from streams passing through residential areas (e.g. Manoa Stream). Further data are needed to define possible health risks associated with these types of exposures.

Nonetheless, until further data are obtained, the Department of Health is recommending that the state consider a temporary suspension of a "Special Local Needs Registration" that allows chlordane to be applied to crawl space areas under homes in Hawaii. This should reduce the potential for exposures to chlordane through volatilization.

In addition, since Hawaii has an exemption that allows untrained persons to apply chlordane to their homes, we are recommending that this practice be disallowed immediately. There is an obvious increased risk of misuse and undue exposure when untrained persons use a pesticide. As new data are obtained, further regulatory actions may be indicated.

These and other controversial issues concerning toxic substances in the environment will increase public awareness of potential health hazards. We physicians need to increase our awareness of the role these substances play in the etiology of cancer, birth defects and other chronic disease conditions. We will do well to become more familiar with these issues.

John C. Lewin, MD
Director
State Department of Health

“Le Mot Juste”

Harry L. Arnold Jr., MD*

“**R**eadings maketh a full man; conference a ready man; and writing an exact man,” wrote Francis Bacon, some four centuries ago. To *be* exact, one should have an ear for what the French call *le mot juste* — the exact word.

In choosing a word, one should try to use one when one will do, and a short one when a short one will do. Thus, it’s wasteful to speak of the “anterior surface of the lower leg” — *shin* is what is meant. “Plantar surface of the foot” is another case of language gone to seed: Sole is the word for it. And don’t spoil it by adding “of the foot,” because that’s as silly as saying, or writing, “nose of the face.”

“Upper and lower extremities” translates to *arms* and *legs* without any loss of meaning, or often simply to *limbs*. One of the funnier ones is “skin rash”; my immediate reaction to it is that that’s the worst kind! *Rash* says it all.

But the one construction that prompted this commentary is the prevalent habit, first and foremost of professors and their ilk — but caught, like a contagion, by their students — of designating a patient as a “male” or a “female.” This is a deplorable habit, for several reasons.

In the first place, it depersonalizes a human being — the patient. It makes him seem like an experimental animal, not a

human person. It is like the language of a police report: “Two males were apprehended on the premises.”

In the second place, it’s an uninformative word: It conveys only gender, not species, or even genus; not maturity or immaturity. There are shorter, perfectly familiar words that convey all of these, in addition to gender: “man” means an *adult human male*; “woman,” an *adult human female*. For immature ones, we have “boy” and “girl.”

A “25-year-old Chinese female” doesn’t have to mean a Chinese woman — it could as easily mean a Manchurian mare, or a ginkgo tree. When you can convey genus (*Homo*), species (*sapiens*) and maturity (adult), as well as gender (female) in a single word, *woman*, it is downright wasteful not to do it. Moreover, *woman* connotes a person, not a specimen; there is a dignity about it that is lacking in the word “female.”

One wonders whether “female” is thought to sound more scientific. It *isn’t* scientific, because it’s inexact: It needs to be preceded by the adjectives “adult” and “human” to be an accurate designation. And to me, at least, it sounds less scientific than demeaning or condescending.

There can be no reasonable objection, of course, to the designation of a cohort of women and girls as a group of females, or of men and boys as males. And there is no objection to the use of “female” and “male” as adjectives. But as singular nouns, they’re objectionable on every ground — imprecise, uninformative, and demeaning. So let us do the editors’ job for them, and forswear the use (as nouns) of “male” and “female,” in print and in speech. “Man” and “woman” (or “boy” and “girl”) are each one or more letters shorter, and four times more informative. Let us all unite in stamping out a bad habit!

*Department of Dermatology,
University of California at San Francisco

Address for correspondence:
Harry L. Arnold Jr., MD
250 Laurel St., Suite 301
San Francisco, Calif. 94118

Reprinted with the permission of *Dermatology* and HLA Jr.



Frank E. Ceccarelli, M.D.,
Urology



Susan H. Chapman, M.D.,
Obstetrics/Gynecology



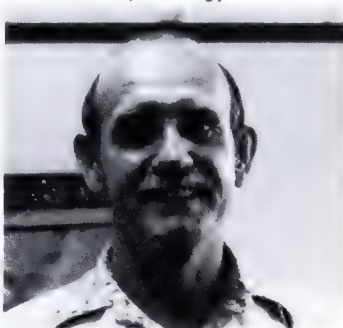
Bernard Fong, M.D.,
Cardiology



Alvin Furuike, M.D.,
Pulmonology



Thomas Y. Ito, M.D.,
Urology



C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



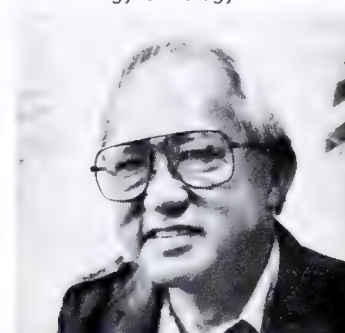
James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



Paul I. Sunahara, M.D.,
Dermatology

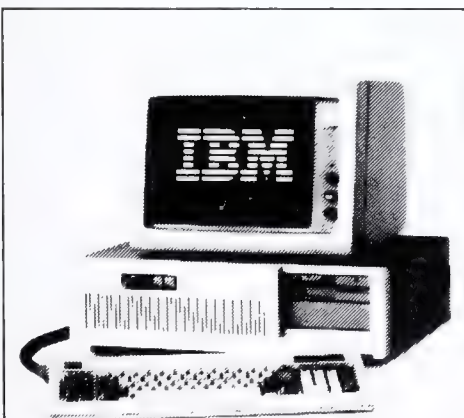


Henry L. Yim, M.D.,
Pediatrics

What do these doctors have in common?

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**



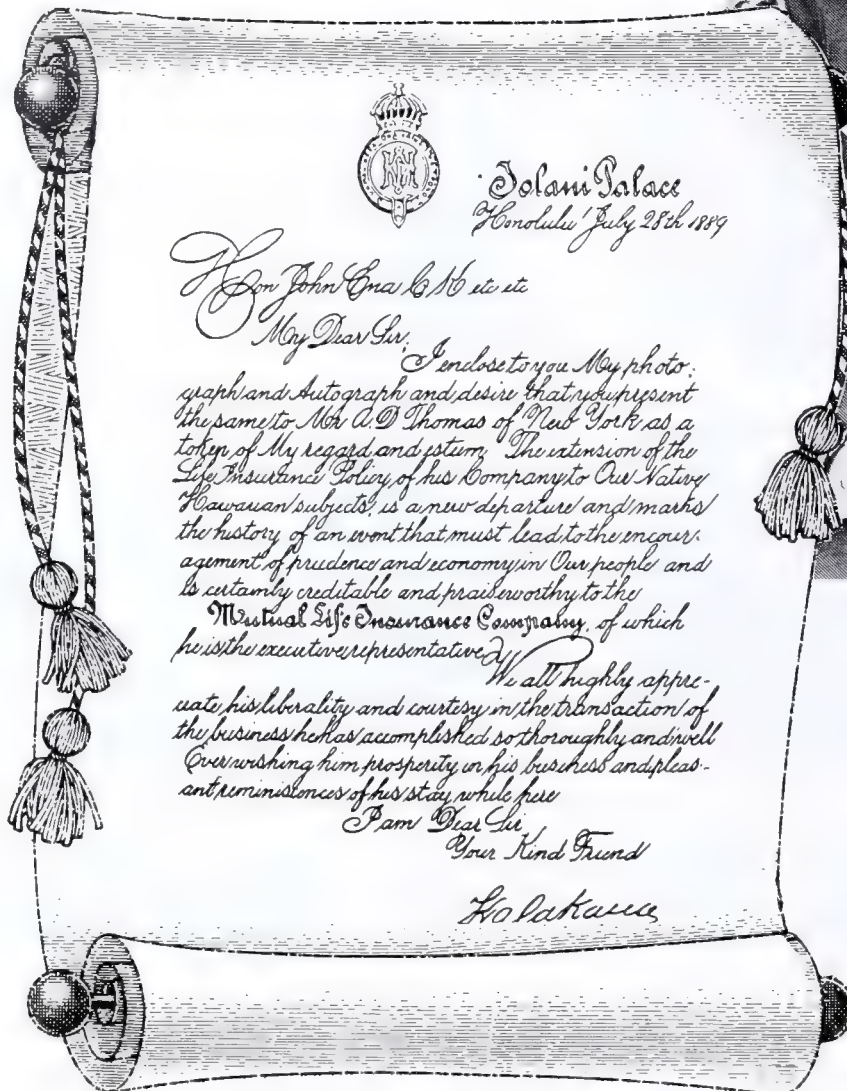
Personal Computer AT is a trademark of
International Business Machines Corporation

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary.

A King's Life Insurance



It was on June 12, 1874 that his majesty, King David Kalakaua, of the independent kingdom of Hawaii made application to Mutual of New York for a \$7,500 policy upon his royal life. This was practically coincidental with his ascension to the throne to which he had been elected by ballot of the Hawaiian legislature.

The Underwriter in the case was a Mr. A.D. Thomas of San Francisco who seems to have been pretty much of a world traveler. He was a member of the field staff of MONY's General-Agency in San Francisco, headed by A.B. Forbes.

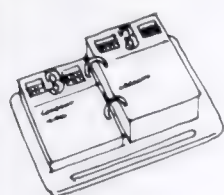
King Kalakaua was then in his 38th year, and paid an annual premium of \$227.40 on his MONY policy. He let all the dividend additions accumulate; and when he died 17 years later, his beneficiaries collected a death benefit of \$9,875.00.

The above was written about a year and a half before King Kalakaua's death. His majesty died in San Francisco on January 30, 1891 of Bright's Disease.

In Hawaii, it's smart to
know someone with . . .

MONY
FINANCIAL SERVICES

Pacific Tower, Suite 2800 • 1001 Bishop Street • Honolulu, Hawaii 96813
808 - 536-6977



Continuing Medical Education

CALENDAR OF ACCREDITED EVENTS—CATEGORY 1

Accredited Programs of CME allow one unit of AMA credit for each hour of instruction excluding all "breaks." Some programs also are accredited for AAFP prescribed credit.

LOCAL ACCREDITED PROGRAMS ONGOING

For a complete list of ongoing programs, please refer to the March, 1987, edition of the HAWAII MEDICAL JOURNAL. Further information is available through the individual institutions or through the HMA's CME Department.

SPECIAL EVENTS

All special events should be confirmed with the CME program sponsors, as cancellations are not necessarily reported to the HAWAII MEDICAL JOURNAL.

July 1-5, 1987	Emergency Medicine Focus on Pediatric and Geriatric Emergencies, Children's Hospital of Los Angeles, Good Samaritan Hospital, Portland, Ore. 800-421-5719. Location: Kauai.
July 11-18, 1987	Cardiology and Cardiovascular Surgery, Stanford School of Medicine, Office of Postgraduate Medical Education, 415-723-5594. Location: Mauna Kea Beach Hotel, Big Island.
July 11-18, 1987	Advanced Gynecologic Endoscopic Surgery, Laser and Nonlaser Techniques, Symposia Medicus, 2815 Mitchell Dr., Suite 108, Walnut Creek, Calif. 94598, 415-935-7889. Location: Stouffer's Wailea Beach Resort, Maui.
July 12-19, 1987	**Diving and Marine Medicine, Robert K. Overlock, MD, Hyperbaric Treatment Center, 42 Ahui St., Honolulu 96813, 523-9155. Location: Maui.
July 18-24, 1987	Lectures and Discussions on Topics in Gastroenterology and Hepatology, George Washington University Medical Center Division of GI, Department of Medicine, Washington, D.C., 202-676-4285. Location: Waiohai Poipu Beach, Kauai.

Aug. 1-8, 1987	Ophthalmology, University of Southern California School of Medicine, 1975 Zonal Ave., KAM 314, Los Angeles, Calif. 90033. Location: Kamuela, Big Island.
Aug. 9-14, 1987	Neuropsychiatric Aspects of Sociopathy, 14th Annual Symposium, Southern California Neuropsychiatric Institute, 6794 La Jolla Blvd., La Jolla, Calif. 92037-9812, 800-423-9521, Mauna Kea Beach, Big Island.
Aug. 9-24, 1987	Eighth Annual Advances in Clinical Medicine, Practical Clinical Updates for all Physicians and Surgeons, Physicians' Medical Seminars, 800-334-6578. Location: Maui and Oahu.
Aug. 16-26, 23-Sept. 2, 1987	30th Anniversary Postgraduate Refresher Course, University of Southern California School of Medicine, Postgraduate Division, 3500 S. Figueroa, Suite 217, Los Angeles, Calif. 90007, nationwide 800-821-5094. In Calif. 800-521-6511 or 213-746-1384. Locations: Honolulu/Maui; Maui/Kauai.
Aug. 22-29, 1987	Seventh Annual Symposium on Fine Needle Aspiration, University of California, San Francisco, Extended Programs in Medical Education, Room U-569, San Francisco, Calif. 94143-0742. Location: Maui.
Aug. 23-26, 1987	Ventura Heart Institute International Pacific Basin Symposium on Cardiovascular Disease, Ventura Heart Institute, 805-497-2727. Location: Mauna Lani Bay Hotel, Big Island.
Aug. 23-28, 1987	Hawaiian Seminar on Clinical Anesthesia, California Society of Anesthesiologists Educational Programs Division, 415-348-1407. Location: Sheraton Waikoloa, Big Island.
Aug. 28-30, 1987	Dermatology Professors Conference, Hawaii Dermatology Society and The Hawaii Medical Association; Douglas Johnson, MD, 1380 Lusitana St., Suite 401, Honolulu 96813, 808-531-7541. Location: Poipu Sheraton, Kauai.

INSTRUCTIONS TO AUTHORS HAWAII MEDICAL JOURNAL

SUMMARY OF REQUIREMENTS

Type manuscript double spaced, including title page, abstract, text, acknowledgments, references, tables, and legends.

Each manuscript component should begin on a new page, in this sequence:

Title

Text

Acknowledgments

References

Tables: each table, complete with title and footnotes, on a separate page

Legends for illustrations

Illustrations must be good quality, unmounted glossy prints usually 12.7 by 17.3 cm. (5 by 7 in.) but no larger than 20.3 by 25.4 cm. (8 by 10 in.).

SUBMISSION OF MANUSCRIPTS

Mail the manuscript in a heavy paper envelope, enclosing the manuscript and figures in cardboard, if necessary, to prevent bending of photographs during mail handling. Place photographs in a separate, smaller, heavy paper envelope.

Manuscripts should be accompanied by a covering letter from the author who will be responsible for correspondence regarding the manuscript. The covering letter should contain a statement that the manuscript has been seen and approved by all authors. Include copies of any permissions needed to reproduce published material or to use illustrations of identifiable subjects. Mail to Editor, Hawaii Medical Journal, c/o Hawaii Medical Association, 320 Ward Avenue, Suite 200, Honolulu, Hawaii 96814.

PREPARATION OF MANUSCRIPT

Type manuscript on white bond paper, 20.3 by 26.7 cm. or 21.6 by 27.9 cm. (8 by 10½ in. or 8½ by 11 in.) with margins of at least 2.5 cm. (1 in.). Use double spacing throughout, including title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: Title Page, Acknowledgments, References, Tables and legends. Number pages consecutively, beginning with the Title Page. Type the page number in the upper right-hand corner of each page.

Manuscripts will be reviewed for possible publication with the understanding that they are being submitted to one journal at a time and have not been published, simultaneously submitted, or already accepted for publication elsewhere. This does not preclude consideration of a manuscript that has been rejected by another journal or of a complete report that follows publication of preliminary findings elsewhere, usually in the form of an abstract. Copies of any possibly duplicative published material should be submitted with the manuscript that is being sent for consideration.

TITLE PAGE: The title page should contain (1) the title of the article, which should be concise but informative; (2) a short running head or footline of no more than 40 characters (count letters and spaces) placed at the top of the title page; (3) first name, middle initial, and last name of each author, with highest academic degree(s); (4) name of department(s) and institution(s) to which the work should be attributed; (5) disclaimers, if any; (6) name and address of author responsible for correspondence about the manuscript; (7) names and address of author to whom requests for reprints should be addressed, or statement that reprints will not be available from the author; (8) the source(s) of support in the form of grants, equipment, drugs, or all of these.

TEXT: The text of observational and experimental articles is usually—but not necessarily—divided into sections with the headings: Introduction, Methods, Results, and Discussion. Long articles may need subheadings within some sections to clarify their content, especially the Results and Discussion sections.

Introduction: Clearly state the purpose of the article. Summarize the rationale for the study or observation. Give only strictly pertinent references, and do not review the subject extensively.

Methods: Describe your selection of the observational or experimental subjects (patients or experimental animals, including controls) clearly. Identify the methods, apparatus (manufacturer's name and address in parenthesis), and procedures in sufficient detail to allow other workers to reproduce the results. Give references to established methods, including statistical methods; provide references and brief descriptions of methods that have been published but are not well known; describe new or substantially modified methods, give reasons for using them, and evaluate their limitations.

Include numbers of observations and the statistical significance of the findings when appropriate. Detailed statistical analyses, mathematical derivations, and the like may sometimes be suitably presented in the form of one or more appendixes.

Results: Present your results in logical sequence in the text, tables, and illustrations. Do not repeat in the text all the data in the tables and/or illustrations: emphasize or summarize only important observations.

Discussion: Emphasize the new and important aspects of the study and conclusions that follow from them. Do not repeat in detail data given in the Results section. Include in the Discussion the implications of the findings and their limitations and relate the observations to other relevant studies. Link the conclusions with the goals of the study but avoid unqualified statements and conclusions not completely supported by your data. Avoid claiming priority and alluding to work that has not been completed. State new hypotheses when warranted, but clearly label them as such. Recommendations, when appropriate, may be included.

ACKNOWLEDGMENTS: Acknowledge only persons who have made substantive contributions to the study. Authors are responsible for obtaining written permission from everyone acknowledged by name because readers may infer their endorsement of the data and conclusions.

REFERENCES: Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals. References cited only in tables or in legends to figures should be numbered in accordance with a sequence established by the first identification in the text of the particular table or illustration.

Use the form of references adopted by the U. S. National Library of Medicine and used in *Index Medicus*. The titles of journals should be abbreviated according to the style used in *Index Medicus*.

TABLES: Type each table on a separate sheet; remember to double space. Number tables consecutively and supply a brief title for each. Give each column a short or abbreviated heading. Place explanatory matter in footnotes, not in the heading. Explain in footnotes all nonstandard abbreviations that are used in each table. For footnotes, use the following symbols in this sequence: *, †, ‡, §, ¶, **, ††. . . Identify statistical measures of variations such as SD and SFM.

ILLUSTRATIONS: Submit the required number of complete sets of figures. Figures should be professionally drawn and photographed; freehand or typewritten lettering is unacceptable. Instead of original drawings, roentgenograms, and other material, send sharp, glossy black-and-white photographic prints, usually 12.7 by 17.3 cm. (5 by 7 in.) but no larger than 20.3 by 25.4 cm. (8 by 10 in.). Letters, numbers, and symbols should be clear and even throughout, and of sufficient size that when reduced for publication each item will still be legible. Titles and detailed explanations belong in the legends for illustrations, not on the illustrations themselves.

Each figure should have a label pasted on its back indicating the number of the figure, the name of the authors, and the top of the figure. Do not write on the back of the figures or mount them on cardboard, or scratch or mar them using paper clips. Do not bend figures.

LEGENDS FOR ILLUSTRATIONS: Type legends for illustrations double spaced, starting on a separate page with arabic numerals corresponding to the illustrations. When symbols, arrows, numbers, or letters are used to identify parts of the illustrations, identify and explain each one clearly in the legend. Explain internal scale and identify method of staining in the photomicrographs.

News from  about a new dosage form of cephalexin

ANNOUNCING NEW

KefletTM **TABLETS** **cephalexin**

**All the advantages of cephalexin
in a convenient tablet form**

- Backed by over 15 years of clinical experience
- Smaller tablet is specially shaped and coated for easier swallowing
- May enhance patient compliance, particularly among the elderly
- Tablet dosage form may be appreciated by patients of all ages

NEW Keflet Tablets are available as:

250-mg
Tablets



500-mg
Tablets

Keflet is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-sensitive patients.

Keflet™ Tablets

cephalexin

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Keflet™ Tablets (cephalexin, Dista) are indicated for the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Respiratory tract infections caused by *Streptococcus pneumoniae* and group A β -hemolytic streptococci (Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. Keflet is generally effective in the eradication of streptococci from the nasopharynx; however, substantial data establishing the efficacy of Keflet in the subsequent prevention of rheumatic fever are not available at present.)

Otitis media due to *S pneumoniae*, *Haemophilus influenzae*, staphylococci, streptococci, and *Neisseria catarrhalis*

Skin and skin-structure infections caused by staphylococci and/or streptococci

Bone infections caused by staphylococci and/or *Proteus mirabilis*

Genitourinary tract infections, including acute prostatitis, caused by *Escherichia coli*, *P mirabilis*, and *Klebsiella* sp.

Note—Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.

Contraindication: Keflet is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: BEFORE CEPHALEXIN THERAPY IS INSTITUTED, CAREFUL INQUIRY SHOULD BE MADE CONCERNING PREVIOUS HYPERSENSITIVITY REACTIONS TO CEPHALOSPORINS AND PENICILLIN CEPHALOSPORIN C DERIVATIVES SHOULD BE GIVEN CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. SERIOUS ACUTE HYPERSENSITIVITY REACTIONS MAY REQUIRE EPINEPHRINE AND OTHER EMERGENCY MEASURES.

There is some clinical and laboratory evidence of partial cross-allergenicity of the penicillins and the cephalosporins. Patients have been reported to have had severe reactions (including anaphylaxis) to both drugs.

Any patient who has demonstrated some form of allergy, particularly to drugs, should receive antibiotics cautiously. No exception should be made with regard to Keflet.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semi-synthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C difficile*. Other causes of colitis should be ruled out.

Usage in Pregnancy—Safety of this product for use during pregnancy has not been established.

Precautions: *General*—Patients should be followed carefully so that any side effects or unusual manifestations of drug idiosyncrasy may be detected. If an allergic reaction to Keflet occurs, the drug should be discontinued and the patient treated with the usual agents (eg, epinephrine or other pressor amines, antihistamines, or corticosteroids).

Prolonged use of Keflet may result in the overgrowth of

nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when anti-globulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Keflet should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

Indicated surgical procedures should be performed in conjunction with antibiotic therapy.

As a result of administration of Keflet, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—The daily oral administration of cephalexin to rats in doses of 250 or 500 mg/kg prior to and during pregnancy, or to rats and mice during the period of organogenesis only, had no adverse effect on fertility, fetal viability, fetal weight, or litter size. Note that the safety of cephalexin during pregnancy in humans has not been established.

Cephalexin showed no enhanced toxicity in weanling and newborn rats as compared with adult animals. Nevertheless, because the studies in humans cannot rule out the possibility of harm, Keflet should be used during pregnancy only if clearly needed.

Nursing Mothers—The excretion of cephalexin in the milk increased up to 4 hours after a 500-mg dose; the drug reached a maximum level of 4 µg/mL, then decreased gradually, and had disappeared 8 hours after administration. Caution should be exercised when Keflet is administered to a nursing woman.

Adverse Reactions: *Gastrointestinal*—Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely. The most frequent side effect has been diarrhea. It was very rarely severe enough to warrant cessation of therapy. Dyspepsia and abdominal pain have also occurred. As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

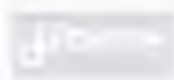
Hypersensitivity—Allergic reactions in the form of rash, urticaria, angioedema, and, rarely, erythema multiforme, Stevens-Johnson Syndrome, or toxic epidermal necrolysis have been observed. These reactions usually subsided upon discontinuation of the drug. Anaphylaxis has also been reported.

Other reactions have included genital and anal pruritus, genital moniliasis, vaginitis and vaginal discharge, dizziness, fatigue and headache. Eosinophilia, neutropenia, thrombocytopenia, and slight elevations in SGOT and SGPT have been reported.

PV2211 DPP

111178b

Additional information available to the profession on request from



Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46285
Mfd by Eli Lilly Industries, Inc
Carolina, Puerto Rico 00630

720112

Prematures Enter School: A Follow-up Study

Mary S. Sheridan, PhD, ACSW*

A follow-up study of educational adjustment to kindergarten and first grade was done on 28 children born in Hawaii an average of six weeks prematurely. The study suggested that the majority of premature infants can be expected to do well at least in the early school years, and that regardless of educational placement, the majority of parents are satisfied with their child's achievement. Although a history of prematurity is important, other neonatal factors also determine outcome.

Over the last two decades, through the application of sophisticated technology, it has become possible to save the lives of many premature infants. However, accompanying this constant push for the limits of human viability, there has been a natural concern, both inside and outside neonatology, as to the quality of the lives saved.

Questions about quality of life are difficult to answer because of the length of time during which intelligence, achievement and deficits develop and interact with social, environmental, familial and cultural factors. Because of this complexity, there is a need for many interdisciplinary follow-up projects that attempt to map the various roles entered into by former prematures.

Prematures in the Literature

A number of research efforts have been attempted to document what happens to premature or low birth weight children as they move through successive developmental stages. Hunt et al.¹ stress the importance of making measurements over time; they feel that neither the presence nor the absence of mild problems in infancy are highly predictive of later functioning. The literature as a whole suggests that prematures are disproportionately likely to suffer some intellectual impairment, often of the "softer" sort, such as borderline retardation or learning disability.²

Such problems are often not apparent until well into the school years, when children are asked to perform more complex educational tasks. However, the reported incidence of such learning dysfunction varies.

Caputo et al.³ found no significant differences between their prematures and full-term controls, while Werner et al.⁴ found that 39% of their study group required at least some special assistance in school. Anderson⁵ provides a useful summary of

the literature on the basis of birth weight, as shown in Table I.

Most follow-up studies of prematures concentrate on the physical examination, performance in the physician's office, or standardized test data. Although these are important measures, there have been few studies of the educational adjustment of prematures from the perspectives of both the school and the parent. This seemed to be a needed area of inquiry and, therefore, it was decided to investigate a small population of infants born prematurely in Hawaii.

The Study

This study was an attempt to measure certain aspects of school performance, parental satisfaction with the child's educational achievement and to discover in particular whether prematures as a group were judged by their parents and by their teachers to be performing differently from their peers in the first two years of school.

TABLE I
Outcome for Prematures According to
Birth Weight and Respirator Status

Birth Weight*	Dead	Major Handicap**	Alive, No Handicap
< 800 gm. (1 lb 12 oz)	75%	49%	13%
< 1000 gm. (2 lb 4 oz)	54-87%	21-55%	6-32%
< 1250 gm. (2 lb 12 oz)	54%	14%	40%
< 1500 gm.: 3 lb 5 oz)	37-47%	11-23%	41-53%
All			
No Respirator	57%	30%	30%
No Respirator	20%	10%	72%

* Weights are cumulative

** Proportion of survivors

TABLE I: "Follow-Up of the High-Risk Infant: Methods of Evaluation and Management," SR Anderson.

Accepted for publication May 1987

* Kapiolani Medical Center for Women and Children
1319 Punahou St., Honolulu, Hawaii 96826

For any child, school performance comprises competence in a number of areas, including verbal, numeric and social. For growing prematures, school performance can thus be seen as a real-world measure of their ability over time to compensate for the early stresses of prematurity.

With the cooperation of the Neonatal Intensive Care Follow-up Program at Kapiolani Medical Center for Women and Children, a group of 40 children born in Hawaii between 1975 and 1976 were studied during their kindergarten or first-grade years.

This survey had two parts: First, parents were contacted for their consent and for their perceptions of the child's school performance. Second, with the permission of the parents, the child's teacher was asked to rank the student against his or her peers in regular education classes at the same grade level. For those students discovered to be at special education levels, school testing records were reviewed. Of the 40 children identified as premies, the parents of 28 responded (70%). Only one parent refused to participate, feeling that she did not want her child singled out. Eleven parents neither responded to the questionnaire nor to telephone follow-up attempts. Summary information on the children can be found in Table II.

At the time of the survey, 14 of the children in regular education were in kindergarten and seven were in first grade. Of the children eligible for special education, two were in a placement for orthopedically or health impaired, two were receiving services as speech/language-impaired and three were certified as learning-disabled. It can be seen immediately that those children in special education were not always the youngest or the smallest of the prematures. Rather, it will be necessary to look at them in a more individual fashion.

**Students in
Regular Education**

Parents' Perceptions. Twenty of the 21 parents with children in regular classes indicated that they were satisfied with their children's educational achievements. The one mother who was dissatisfied felt that her son lacked motivation, and that he had missed much school due to illness. This child's teacher felt that he ought to be considered for special help.

The parents of one regular education child felt he currently needed tutoring at home because "school was too hard." The teacher, however, felt the problem was primarily motivational, that it was being resolved, and would disappear with time.

No regular education parents reported that their child had needed extra help at the school level. However, one child was reported by the teacher to be in a "special," classroom-based program, and the teachers reported that three students could be candidates for school-level tutoring. These were the boys mentioned above, and kindergarten and first-grade boys with re-

ported short-attention spans. None of the regular education students had yet repeated a grade.

In summary, most of these regular education students satisfied both their parents and their teachers. However, a few raised questions in their teachers' minds, about problems of which their parents were unaware.

The study also asked parents questions about each child's strengths and weaknesses. Three parents did not respond at all to these questions. Two reported only passive talents: A child who liked to be read to, or who enjoyed watching television. However, many parents reported active competencies in their children: School-related areas such as reading or writing (nine); a love of art or music (six); or athletic ability (one).

The comments of many parents indicated close interest in, knowledge of, and enthusiasm for their children. One mother wrote, "It's easy to love one's children — not always so easy to like them. I really like John, he's a neat little guy!"

Parents were equally knowledgeable of their children's weak areas. The ones listed included lack of motivation or interest in school (two), listening or attention problems (three), immaturity or irresponsibility (two), minor behavioral problems such as talking or rushing through work (two), shyness or difficulty in personal expression (two), coordination or physical education difficulties (two), and problems with various school subjects such as spelling and math (four).

One mother felt that her kindergartener might have a perceptual problem, since the child had difficulty completing her work. It is of note that many of these problems might be the first sign of possible learning impairment, but might also be apparent in a group of children who are still quite young, or who might be thought of as being young for their age. Only time will tell whether these students outgrow their problems, or whether these are the first signs of learning disabilities. Most parental assessments seemed to show a balance. For example, several children were described as good with reading but not with numbers, or vice versa.

Teachers' Perceptions. When teachers were asked to rank the regular education students (the premies) against their classroom normal by several different measures, a similar picture of normality emerged, as shown in Table III.

A larger number of teachers (10) than parents did not respond to questions about specific strengths and weaknesses in the students. Three teachers cited only weaknesses: Work habits, attention span and immaturity. Three other teachers cited only strengths: Artistic talent, a "model child," "friendly and eager to learn."

The remaining children were described as having a mix of strengths and weaknesses. Three of the children were described as quite artistic; one had won second place in competition with nearly 200 other students.

Lack of coordination, poor listening habits and short attention span — all of which might, again, be related to either immaturity or incipient learning disability — were the common weaknesses cited in these more "balanced" evaluations.

**Students in
Special Education**

As mentioned above, seven students (three boys, four girls, or 25% of the total group) were considered to have special education eligibility. This finding was disproportionate to the general population: Only about 2% of kindergarteners and 4% to 5% of first-graders overall in Hawaii are eligible for special education.⁶ Although the study group students were all handicapped according to the provisions of the law, a review of their educational records showed them to be quite diverse in capacities.

TABLE II
The Study Population

	Total Group	Regular Educa.	Special Educa.
Responses	28	21	7
Boys	18	15	3
Girls	10	6	4
Avg. Birthweight	2099gm.	2094gm.	2114gm.
Avg. Gest. Age	34wk.	34wk.	36wk.

Two students were placed in an orthopedically handicapped/health-impaired class, both as a result of cerebral palsy. One of these children was functioning in the borderline to moderately retarded range (depending on the testing instrument used), with severe communication problems and needing to depend primarily on sign language and a communication board. The other child had IQ and receptive vocabulary scores above age level, but had significant problems with articulation and expressive language.

Two additional students had special education eligibility on the basis of being speech-impaired. Both had articulation problems and one was weak in expressive language.

Three of the students were classified as learning disabled. These students scored in the low-average to borderline range intellectually, with discrepancies among the various subscales and difficulties in areas such as visual-motor coordination. One of these children wore a hearing aid and another had a seizure disorder. The third had repeated a grade due to overall physical and academic immaturity.

Parents' Perceptions. In spite of the problems described above, six of the seven parents of special education children were satisfied with their child's progress in school. While these parents were aware that their children were receiving special help, only one had given extra help at home. Like the parents of the children in the regular education group, most were able to cite a mixture of strengths and weaknesses in their children.

Areas considered strong by the parents included reading (three children, two confirmed by the teacher), art (two), math and dancing (indicated as low areas by the teacher) and beginning writing skills.

Weak areas included speech (an area of remediation at school), coordination, reading (in a learning disabled child) and "strong willed." Two parents did not list either strengths or weaknesses for their children.

In summary, parents seemed to accept their children and their children's problems, and to see the remediation of these problems as primarily the school's business. This probably represents a mixture of cultural and pragmatic attitudes.

Teachers' Reports. As would be expected, the premies in special education were not performing as well as the average level of their regular education peers. There was somewhat more variability in their scores than occurred in those of the children in the regular education group, as can be seen in Table IV. Although the students' performances were below those of their peers in all areas, these students were relatively strong in academic and pre-academic areas, with relative weaknesses in speech and coordination.

Teachers of two of the special education students did not list specific areas of either strength or weakness. Two additional teachers listed only negative areas: Weakness in speech and coordination, and the fact that one girl was repeating kindergarten. The remaining three children received both positive and negative comments: Good in art but weak in speech (speech/language-impaired child), poor social interaction and listening but willing to try anything (cerebral palsied child), loving personality but visual/motor and memory difficulties (learning-disabled child).

In summary, while parent and teacher evaluations may be somewhat more negative for children in special education, and may not always agree, there are certainly many positives on which to build. It also appears that the schools have been responsive to the needs of these handicapped children.

TABLE III
Teacher Evaluations: Prematures in Regular Education and Their Peers

Area	Average Score*	Standard Deviation
Reading	3.38	1.20
Math	3.43	1.08
Listening	3.30	1.20
Speaking	3.10	0.94
Fine Motor	3.14	0.96
Gross Motor	3.10	0.94
Getting along w/others	3.57	0.93
Creativity	3.38	0.92
Attention to task	3.14	1.35
Ability to work alone	3.33	1.32
Social Maturity	3.24	0.89
Average total (11 areas)	36.00	9.33

* On a scale ranging from 5 (one of the best in the class) to 1 (one of the lowest in the class). A score of 3 indicated average performance.

TABLE IV
Teacher Evaluations: Prematures in Special Education

Area	Average Score*	Standard Deviation
Reading	2.71	1.78
Math	2.71	1.78
Listening	2.56	1.62
Speaking	1.86	1.21
Fine Motor	2.00	1.53
Gross Motor	2.00	1.29
Getting along w/others	2.57	1.62
Creativity	2.43	1.34
Attention to task	2.57	1.51
Ability to work alone	2.57	1.51
Social Maturity	2.43	1.13
Average total (11 areas)	26.43	14.72

* On a scale ranging from 5 (one of the best in the class) to 1 (one of the lowest in the class). A score of 3 indicated average performance.

Conclusions

This study suggests that the school performance of the majority of surveyed prematures was within the normal range. A higher than expected number (25%) were found to be receiving special education, but this did not always imply severe dysfunction. Those students in special education were not the youngest or smallest of the prematures, and thus support is given for the idea that gestational age is not the sole predictor of later school accomplishment.

(Continued on page 276)

Behavioral Treatment of Palmar Hyperhidrosis

William T. Tsumima, PhD*
Roman W. Glamb, MD*
Dawn B. Pang, PhD**

Patients with chronic palmar hyperhidrosis were provided one of two forms of behavioral treatment for their handsweating. Seven patients received only relaxation instructions, while four patients received relaxation instructions combined with galvanic skin response (GSR) biofeedback training.

The patients receiving the combined relaxation/biofeedback therapy significantly lowered their palmar GSR levels, while those receiving only relaxation training showed no change in their GSR readings.

However, both treatment groups had similar reduction in their self-reports of handsweating, with changes approaching statistical significance. The role of relaxation training in controlling palmar hyperhidrosis is discussed, along with the limitations of this preliminary study.

Hyperhidrosis is a complaint of chronic excessive sweating that is often encountered in a dermatologic practice. Although many people find hyperhidrosis to be merely a nuisance, those who seek medical attention tend to have more severe symptoms that are a major source of social embarrassment and inconvenience.

To date, most medical therapy for hyperhidrosis has been ineffective, partially effective or potentially harmful. Anticholinergic drugs may produce urinary retention, dry mouth and blurred vision in the doses necessary to control sweating.¹ Formaldehyde soaks have a risk of producing allergic contact dermatitis, while glutaraldehyde soaks yield cosmetically unacceptable hyperpigmentation.² Aluminum chloride is safe but causes improvement in only a small percentage of patients.³

Other methods, such as iontophoresis, have a marked but temporary suppressive effect and require therapy to be maintained.⁴ Radiation can suppress sweating, except that the amount of radiation needed may induce permanent skin changes. Surgical sympathectomy could result in permanently dry, flushed skin,⁵ and in one study the relapse rate after thoracic sympathectomy was high.⁶

Since excessive sweating usually represents a physiological response to emotional stress, a desirable alternative could be a behavioral treatment program that teaches the patient self-control over anxiety that results in sweating. Positive results in a

single case study were reported by Bar and Kuypers⁷ with a hyperhidrotic patient effectively treated by assertiveness training and systematic desensitization.

The success that biofeedback therapy has had as a behavioral treatment for stress-related disorders prompted Duller and Gentry⁸ to try to train 14 hyperhidrosis patients to reduce the magnitude of their sweat response as measured by a water vapor analyzer. Eleven of the 14 patients trained with biofeedback were able to demonstrate clinical improvement in their excessive sweating after 10 training sessions. Subjective reports from the patients suggested that relaxation was the active ingredient in the biofeedback treatment effect.

Other than the Duller and Gentry study and a single case report by Harris and Sieveking,⁹ there are no data demonstrating the efficacy of biofeedback therapy with hyperhidrosis patients. It is not known as to whether therapeutic gains in hyperhidrosis are obtained through a specific biofeedback training effect (i.e., the increased ability to control galvanic skin reactions and to decrease skin sweating) or through a generalized relaxation response, as suggested by Duller and Gentry.

The present research was an attempt to compare the results of relaxation training alone, with the outcome of relaxation training combined with biofeedback procedures in a small sample of patients with palmar hyperhidrosis.

Method

Eleven adults who suffered from excessive handsweating volunteered to participate in a six-week behavioral treatment program. The subjects, who ranged in age from 17 to 64 years, were evaluated by a dermatologist to confirm the diagnosis of chronic hyperhidrosis and to assess the appropriateness of a behaviorally oriented therapy program. The duration of symptoms of handsweating extended from 14 to 64 years (mean = 30.3 years).

The seven in the Relaxation-only group had a mean age of 38.7 years (SD = 17.9), while the four in the Relaxation/Biofeedback group had a mean age of 38.3 years (SD = 6.5). The Relaxation group reported that its handsweating problem was first noticed at a mean age of 10.2 years (SD = 6.4), and the Relaxation/Biofeedback group first noticed its problem at a mean age of 9.7 years (SD = 7.2). Mean length of the handsweating problem was 34.3 years (SD = 19.8) for the Relaxation group and 23.3 years (SD = 3.8) for the

(Continued on page 259)

Accepted for publication May 1987

* From the Straub Clinic & Hospital

** From the University of Hawaii

DRIVING *Impressions*

A Crossroads Press advertising supplement to Pacific Business News,
Hawaii Medical Journal, Hawaii Dental Journal, Hawaii Bar News, and The Balance Sheet.

Space age
comes to
automobiles

How to
buy a car



Schuman Carriage. The Cadillac of car dealers.

Given the tradition of excellence Cadillac has developed over the years, our headline is an extremely bold statement.

It's also extremely true.

You see, there's more to Schuman Carriage Company than a showroom and some cars. There's a ninety-four year history of quality service. A history we live up to every day.

Then there's our staff of friendly, knowledgeable salespeople. People who are your friends, your neighbors.

And from 8:30 a.m. to 9:00 p.m., your experts on Buicks, Cadillacs and Subarus.

Perhaps most important to the success of Schuman Carriage is our attitude. While some dealerships describe themselves as "low pressure," we strive to go a step beyond that.

To "no pressure."

When all is said and done, pleasing the customer is our ultimate objective. To provide the finest cars, the finest salespeople, and the finest environment in Hawaii. All under one roof.

A Cadillac of a challenge? Yes. But one we meet each day.

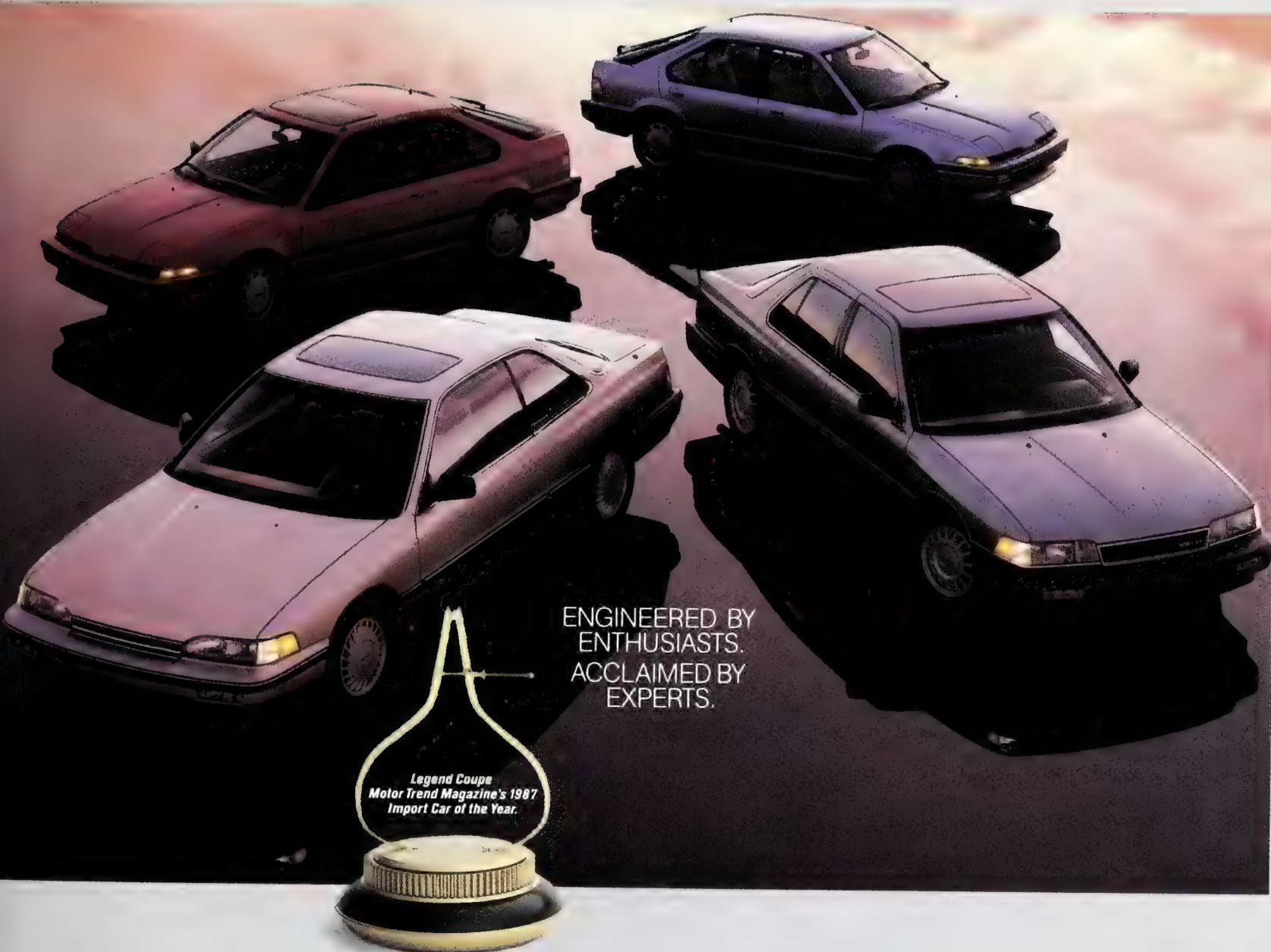


SCHUMAN CARRIAGE CO.
The Cadillac of car dealers.

PRECISION CRAFTED AUTOMOBILES

*We only have one thing to say
about our cars.
Drive it.*

1987 ACURA LEGEND AND INTEGRA



EXCLUSIVELY AT

— PFLUEGER —
ACURA

A division of American Honda Motor Co., Inc.

98-055 KAM HWY., AIEA, HI 96701

OPEN DAILY ▼ PHONE 487-7228

leas·able

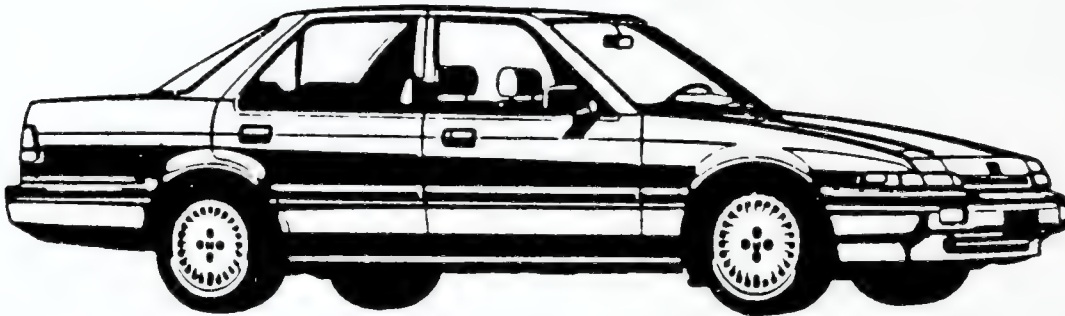
(le-sa-b 'l), *adj.*

1. ability to drive more car for less money
2. opportunity to save or invest your down payment instead of putting it into a car
3. ability to benefit from the new tax laws
4. an affordable way to finance a new Honda 4 dr Accord LX with automatic transmission

\$227.00

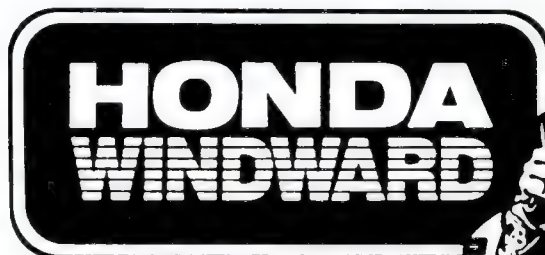
PER MONTH PLUS TAX

Model CA563: 1st payment, security deposit and license fee delivers your car.
60 month closed end lease.

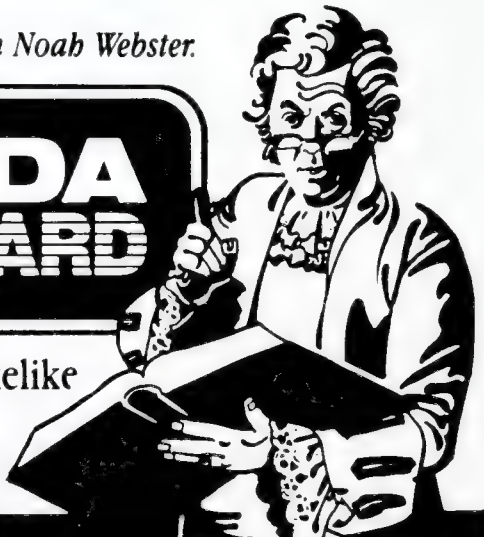


Choose from stock or order one of your choice
for the same Monthly Payment.

A Word to the wise from Noah Webster.



in Kaneohe near Likelike
and Kam Highways
Telephone 247-8544



DRIVING *Impressions*

Dealer	Address	Phone	Lines	Page
Chevrolet Dealers Association			Chevrolet	19
Haleakala Motors Ltd.	260 Hana Hwy., Kahului	877-2066		
Hawaii Motors Inc.	1177 Kilauea Ave., Hilo; 75-5570 Kuakini Hwy., Kona	961-5222, 329-2987		
JN Chevrolet	2999 N. Nimitz Hwy., Honolulu	836-1222		
Rainbow Chevrolet	1341 Kapiolani Blvd., Honolulu	528-1720		
Service Motor Co. Wahiawa	105 S. Kam Hwy., Wahiawa	622-4195		
Waipahu Auto	94-729 Farrington Hwy., Waipahu	671-2871		
The Cutter Team				20
Cutter Ford Isuzu	98-015 Kam Hwy., Aiea	487-3811	Ford, Isuzu	
Cutter Dodge	3149 Nimitz Hwy., Honolulu	836-0626	Dodge	
Cutter Dodge	921 Kam Hwy., Pearl City	455-1071	Dodge	
Rainbow Chevrolet	1341 Kapiolani Blvd.; Kapiolani & Kalakaua	528-1720, 943-0031	New Chevrolet, used cars	
Cutter AMC Jeep/Renault	94-149 Farrington Hwy., Waipahu	671-2626	AMC Jeep, Renault	
Courtesy Pontiac/AMC Jeep/Renault	1391 Kapiolani Blvd., Honolulu	946-8311	Pontiac, AMC Jeep, Renault	
Cutter Mitsubishi	94-149 Farrington Hwy., Waipahu	671-2626	New Mitsubishi	
Cutter Nissan	1935 Main St., Wailuku	244-7433	Nissan	
Cutter AMC Jeep/Renault	1960 Main St., Wailuku	244-7433	AMC Jeep, Renault	
Courtesy Rolls Royce	1391 Kapiolani Blvd., Honolulu	946-8311	Rolls Royce	
Hawaii Renault/Jeep Dealers Association				15
Courtesy AMC Jeep/Renault	1391 Kapiolani Blvd., Honolulu	946-8311	AMC Jeep, Renault	
Cutter AMC Jeep/Renault	94-149 Farrington Hwy., Waipahu	671-2626	AMC Jeep, Renault	
Kauai Auto Center	3156 Hoolako St., Lihue	245-4788	AMC Jeep, Renault	
Cutter AMC Jeep/Renault	1960 Main St., Wailuku	244-7433	AMC Jeep, Renault	
Hawaii Pontiac Dealers Association				17
Courtesy Pontiac	1391 Kapiolani Blvd., Honolulu	946-8311	Pontiac, AMC Jeep, Renault	
Haleakala Motors, Ltd.	206 Hana Hwy., Kahului	877-2066	Pontiac, Chevrolet, Buick, Cadillac, Oldsmobile, GMC, Mazda	
Hawaii Motors Inc.	1177 Kilauea Ave., Hilo; 75-5570 Kuakini Hwy., Kona	961-5222, 329-2987	Pontiac, Chevrolet, Buick, Cadillac, Oldsmobile, GMC	
Kuhio Motors	3033 Aukele St., Lihue	245-6731	Pontiac, Chevrolet, Buick, Cadillac, Oldsmobile, GMC, Nissan	
Mike Salta Pontiac	2945 N. Nimitz Hwy., Honolulu	836-2441	Pontiac, Isuzu	
Honda Windward	45-671 Kam Hwy., Kaneohe	247-8544	Honda	4
Honolulu Ford	711 Ala Moana Blvd., Honolulu	523-8200	Ford, Isuzu, Alpha Romeo	12
Nissan			Nissan	6
Honolulu Nissan	630 Piikoi St., Honolulu	531-3721		
Dillingham Nissan	621 Dillingham Blvd., Honolulu	847-6506		
Nissan of Waipahu	94-119 Farrington Hwy., Waipahu	671-2611		
Windward Nissan	46-151 Kahuhipa St., Kaneohe	235-6433		
Kaimuki Nissan	3060 Kapiolani Blvd., Honolulu	734-0241		
Airport Nissan	545 Lagoon Drive, Honolulu	833-0062		
Nissan Pearl City	806 Kam Hwy., Pearl City	456-5938		
Nissan Wahiawa	1912 Wilikina Dr., Wahiawa	621-0761		
Big Island Nissan	471 Kalaniana'ole Ave., Hilo; Kuakini Hwy., Kona	969-1484, 329-4408		
Cutter Nissan	1935 Main St., Wailuku	244-7433		
Nissan of Kauai	3033 Aukele St., Lihue	245-6731		
Pfueger Acura	98-055 Kam Hwy., Aiea	487-7228	Acura	3
Royal Hawaiian Buick Dealers Association				14
Schuman Carriage Co. Ltd.	1234 S. Beretania St., Honolulu	533-6211	Buick, Cadillac, Subaru, O'Gara Limousines	
Hawaii Motors Inc.	1177 Kilauea Ave., Hilo; 75-5570 Kuakini Hwy., Kona	961-5222, 329-2987	Buick, Cadillac, Oldsmobile, Pontiac, Chevrolet, GMC	
Kuhio Motors	3033 Aukele St., Lihue	245-6731	Buick, Cadillac, Oldsmobile, Pontiac, Chevrolet, GMC, Nissan	
Haleakala Motors Ltd.	260 Hana Hwy., Kahului	877-2066	Buick, Cadillac, Oldsmobile, Pontiac, Chevrolet, GMC, Mazda	
Schuman Carriage Co. Ltd.	1234 S. Beretania St., Honolulu	533-6211	Cadillac, Buick, Subaru, O'Gara Limousines	2
Shelly Mazda	830 Kapiolani Blvd., Honolulu	521-8080	Mazda	10, 11
Shelly Mazda	94-212 Leoku St., Waipahu	677-0761	Mazda	
Subaru Dealers of Hawaii			Subaru	18
Al Takahata Subaru	560 Nimitz Hwy., Honolulu	538-0836		
Schuman Carriage	1234 S. Beretania St., Honolulu	533-6211		
Pearl Harbor Subaru	94-223 Farrington Hwy., Pearl Harbor	677-0777		
Subaru Kaneohe	46-177 Kahuhipa St., Kaneohe	235-8744		
Island Subaru	110 S. Hana Hwy., Kahului	877-0031		
Kauai Auto Center	3156 Hoolako, Lihue	245-4788		
Subaru Hawaii	400 Kawili, Hilo; 76-6353 Kuakini Hwy., Kona	935-3741, 329-4408		
TheoDavies Euromotors Ltd.	704 Ala Moana Blvd., Honolulu	531-5971	Mercedes-Benz	9
TheoDavies Euromotors/Big Island Honda	124 Wiwoole St., Hilo; 74-5615 Luhia St., Kona	961-6087, 329-7616	Mercedes-Benz, Honda	

Cover Photo: © Carl Shanef 1987; Cover Design: Fallon A. Lee, Nick Kaars & Assoc.; Special Thanks to Jeanne Diamond

NEW 1987 MAXIMA GXE THE SMART SIDE OF LUXURY.



Nissan proudly invites you to enter our world of luxury...the elegant world of Maxima. It begins with crisp, classic design, re-styled for '87. Beautiful!

In addition to Maxima's outer beauty you'll discover power can be beautiful as well. Under the hood waits a fuel-injected, 3-liter V-6 engine, the same engine that propels the awesome 300 ZX.

Inside Maxima, Nissan's advanced technology continues to shine. The most wanted luxury features like cruise-control, reclining

bucket seats, lumbar support, power windows, air conditioning, 6-speaker AM-FM stereo system with Dolby cassette and 7-band equalizer and much more, are all standard.

Maxima for '87: One luxury car that's truly a smart choice.

Extended-Service Plan available. When a car is built this good you can back it this good. Up to 5 years/100,000 miles. Ask about Nissan's Security-Plus® at participating Nissan/Datsun dealers.

THE NAME IS NISSAN

Space-age technology

Space-age technology today is not limited to the space program, according to Tom Nakama, president of the Hawaii Renault/Jeep Dealer's Association. Today's car, Nakama believes, represents a new generation of computer-aided and robotic-built vehicles.

For the American Motors Corporation, he says, computers have been a part of the vehicle lineup for the past few years. The power-tech I-7 engine, introduced in Hawaii in 1986, offers one of the most sophisticated computer-designed engines in its class. Available in most Jeep vehicles, it is a space-age engine touted by automotive experts as being one of the most powerful available among newly designed six-cylinder engines. Says Nakama, "Judging by the sales of Jeep vehicles in Hawaii, I'd say that consumers are voicing their approval of this new state-of-the-art Jeep engine."

The American Motors Corporation, he notes, has been in the forefront of the development of the latest in computer aided robot assembly plants. For example, AMC's \$600 million state-of-the-art Canadian plant, designed for the production of the 1988 Renault Premier, boasts a 2.2 million-square-foot assembly plant which hosts more than 125 robots whose sole purpose is to weld, assemble and paint the more than 150,000 cars expected to be built annually.

Choosing the right place to buy a car

Choosing the right place to buy a car can be a different and confusing decision. With so many new models, options and dealers, buying with confidence can be a very stressful experience. The Cutter Team takes the stress out of buying a car. They have over 37 years of automotive experience so they know their customers and the customers' needs.

The Cutter Team began locally with one dealership, Cutter Ford in Aiea. Since then they've grown to include Cutter Ford/Isuzu, Rainbow Chevrolet, Cutter Dodge, Courtesy Pontiac/AMC Jeep Renault, Cutter AMC Jeep Renault,

Cutter Mitsubishi, and the newest team members, Cutter AMC Jeep Renault of Maui and Cutter Nissan of Maui. Having this many dealerships might seem like a lot of work, however, The Cutter Team views it as a challenge to better service their customers.

Customer service and satisfaction is the main concern of The Cutter Team and is of special importance to each and every team member. With such a wide selection and huge inventory at each location they are better able to assist you in the complex task of purchasing a new or used vehicle. Each location is full service including financing, insurance, parts, service and complete customer care before and after the sale.

To quote owner Jerry Cutter, "The Cutter group is a totally people-oriented company. We must always remember that customers are not an interruption of our work but the purpose of it."

Many new and exciting 1988 models are already on view at all of the Cutter Team locations, so stop in soon and experience The Cutter Team difference.

Best-Selling Design

In 1944, there were no Fords being made except for the military. But in 1949 Americans were calling Ford their "Car of the Year," and that was only the beginning. The secret to Ford's continuing success involves combining engineering genius with an intuitive sense of what the public is looking for.

The '49 Fords were radically different: For example, they abandoned the industry-standard protruding fenders and the running boards that traditionally connected them. The new, more integrated look became a big hit with car buyers.

In 1955, Ford took advantage of new lightweight materials and technology to develop the Thunderbird — a low, light, soft-riding car, powered by a hefty V-8 engine. Auto purists of the period refused to classify it as a sports car, but that didn't stop owners from having the time of their lives driving their Thunderbirds.

To give the mid-sized 1962 Fairlane

a full-powered ride, a lightweight V-8 engine was offered that made the most of Ford-developed, thin-wall iron casting techniques. This compact power plant formed the basis of the Ford engine that went on to win at the Indianapolis 500.

The 1983 Ford Thunderbird was totally restructured — a blend of aerodynamics, performance and control that represented a turning point in the design of new Ford cars to follow. The new shape was designed to manage the windflow.

In 1986, Taurus continued this tradition to become the most aerodynamically efficient 6-passenger sedan in America and won the prestigious Motor Trend Car of the Year award.

The 1987 Thunderbird Turbo Coupe, with its world-class design and high-tech performance won the Motor Trend Car of the Year award the following year, making Ford the only automaker to win the award two years in a row.

Precision: The Vital Difference

Precision: The vital difference between ordinary transportation and an automobile that's an extension of the driver's desires.

Introducing Acura . . . the precision-crafted automobiles that have set new standards for performance, quality, technical sophistication and the simple pleasure of driving. Acura from American Honda.

For 1987, the praise is resounding. The editors of Car and Driver Magazine included the Acura Integra in their annual listing of Ten Best Cars. Motor Trend Magazine rated the new Acura Legend Coupe and the Acura Integra first and second in its annual Import Car of the Year competition.

Acura Legend — a unique integration of quality, comfort and space in an automobile that's powerful, responsive and efficient. Inspired by racing, the Legend's fuel-injected, 24-valve, single-overhead cam V-6 engine is lightweight, powerful, fuel efficient and very smooth.

Integra sedans offer a combination
(Continued on page S-8)

(Continued from page S-7)

of aerodynamics, engineering, advanced electronics, ergonomics and contemporary design. But more important, they're fun to drive. The Integra engine is a perfect example of Formula 1 power technology translated for the street. Its 4-valves-per-cylinder design promotes better flow through the combustion chamber, for more power. Power that creates an exciting new world of enjoyment in every driving situation.

Every Acura automobile offers precision you can sense. The unmistakable sound that goes with the closing of quality-constructed doors. The taut feel of a responsive suspension. The exhilaration of race-bred engines.

Acura . . . synonymous with precision . . . setting new standards in driving performance, quality and comfort.

Sometimes Old-Fashioned is Better

Space-age technology is now used to service cars. What used to be hard to diagnose is now easy with computers and print-outs. New parts are fitted to micro-measurements. Service people and mechanics are schooled in the latest technology.

What still counts most, however, is the *attitude* of your car dealer. All of the space-age technology and expertise in the world is worthless unless it's made to fit *your* needs and your schedule.

One car dealer in Hawaii, Schuman Carriage, has recognized this. In servicing its Cadillacs, Buicks, and Subarus, Schuman concentrates upon making sure the customer gets the best of *both* worlds — new space-age technology combined with old-fashioned service.

Recently named by Cadillac as one of the top five of 1,500 Cadillac dealers in the country for service, and named by Buick to be in its Select Sixty group, Schuman concentrates on the secret to all marketing: the customer.

Schuman says that all the emphasis upon the new space-age technology has led too many car dealers to de-emphasize the human side of service, the customer. Yet, says Schuman,

the customer is the most important ingredient.

New cars will always need service, says Schuman, and when that time comes, space-age technology is fine so long as it's applied with regard to the customer's needs. When someone buys a new car, it's a marriage. The customer expects the relationship to last a long time and be trouble-free. That's what Schuman aims for.

"That may be old-fashioned," says Schuman, "but it's also smart business. When the customer is satisfied, he or she comes back. When they're not satisfied, we lose a customer."

The car customer ought to look for space-age technology, but only so long as it comes in this old-fashioned package offered by Schuman Carriage.

How's your CSI?

When you shop for a car, it's a good idea to ask the dealer, "How's your CSI?"

"CSI" stands for "Customer Satisfaction Index." It's a *dealer* rating that covers the way the dealership relates to its customers.

CSI was created to put an emphasis on the *service* aspect of automobile sales — on an industry wide basis. All the automobile dealerships in Hawaii — in the country, in fact — receive quarterly ratings from the manufacturers of the cars they sell. In effect, each rating is a report card that reflects *all* aspects of the dealership's relationship with its customers — from the salesperson's manner to the condition of the delivered car and on to the follow-up.

Unless you have purchased a car previously from a dealer, you have no way of knowing how he will follow through after you have driven off in the car he has sold you.

Too often, in spite of the discipline brought about by CSI, the follow-through is something less than superb.

Nationally, Chevrolet has taken CSI very seriously, indeed. "The Factory" has brought pressure to bear on its dealerships, and *all* Chevy Dealers are feeling it.

If you're not a satisfied Chevrolet customer, they're going to hear

about it in Detroit.

Accordingly, the Hawaii Chevrolet Dealers take pride in the way they follow through after each sale. The attitude is positive. Every customer is treated with respect, and — in the interest of good business — treated as a potential *repeat* customer.

Chevy Dealers in Hawaii want your parts and service business. They want to help you maintain your Chevy properly.

And each one wants you back when you buy your *next* car.

As long as they keep a strong, cooperative, positive relationship with their customers, Hawaii's Chevy Dealers know the CSI will reflect their efforts.

And that keeps *everybody* happy — from Detroit to the Na Pali Coast.

Sporty, Road-Handling Performance

LeMans. The name evokes images of famed European race tracks and fast cars. It takes a person back to a time in Pontiac Division's history some twenty years ago, when the Pontiac LeMans boasted a reputation of distinctive styling in a fine-handling performance car, a reputation that still exists today.

For 1988, the Pontiac LeMans returns in a bold, new statement that is a blending of proven German design and engineering, meticulous assembly in Korea and expressive Pontiac refinements found only in America.

The front-wheel-drive subcompact Pontiac LeMans returns in two body styles — three-door hatchback coupe and four-door notchback sedan. The entry-level LeMans is available in both body styles. The more sporty up-level LeMans SE comes in the notchback sedan style only. A spirited Opel-engineered, Daewoo-manufactured 1.6L overhead cam four-cylinder engine with throttle body fuel injection coupled with a standard 5-speed manual transaxle. A three-speed automatic transaxle and power steering are factory-installed options for both models.

The exterior of the LeMans is noticeably European influenced, with

(Continued on page S-13)



Toast of the Town.



Break out your best champagne... the newest editions of the world's most beautiful cars are at TheoDavies Euromotors today.

Discover how easy it is to put yourself behind the wheel of your favorite Mercedes-Benz. Seven-year financing makes it all possible.

And, if you take delivery in Europe, you could save enough to pay for your trip to Germany... and back!

Call or come in today for all the facts.

Prosit!

 **THEODAVIES
EUROMOTORS**

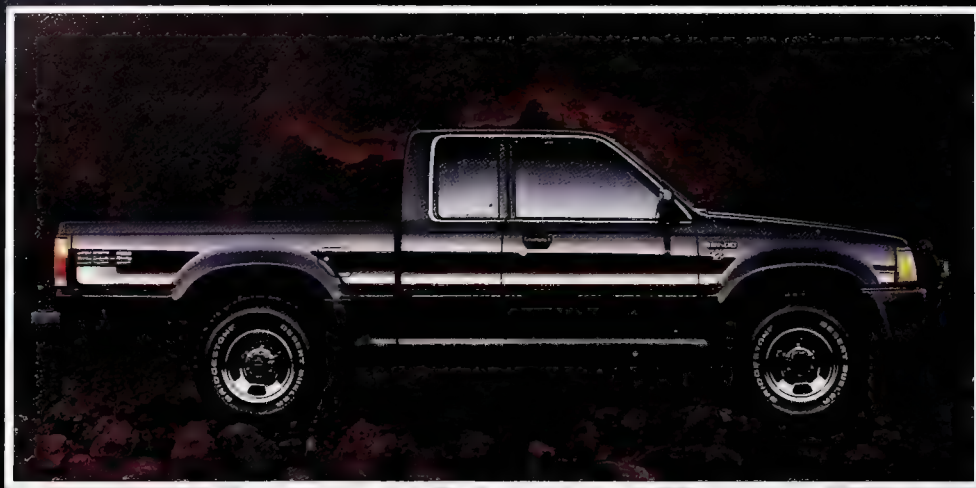
Honolulu
704 Ala Moana Blvd
531-5971

Hilo
124 Wiwoole St
961-6087

Kona
74-5615E Luhia St
329-7616

Just When You Thought You

A first-time-ever Mazda factory offer!



PLUS More
Than \$1,000
Worth of
Accessories
on all 1987
4x4 Trucks

You get these accessories free:

- Stereo cassette player
- Sliding rear windows
- West coast mirrors
- Bed liner



SHELLY

830 Kapiolani Blvd., Honolulu, Ph. 521-80

Couldn't Get a Better Deal!

39%

APR Financing

PLUS Free Air Conditioning
on all 1987 626's

And look at these standard features:

Electronic fuel injection

Power steering

Tilt wheel

AM/FM stereo cassette deck



Offer good with
approved credit
while supplies last.

MAZDA

-212 Leoku St., Waipahu, Ph. 677-0761

THE CAR OF THE YEAR?



Ford Thunderbird Turbo Coupe
1987 Motor Trend Car of the Year

THE CAR OF YOUR LIFE!

For people who love the thrill and exhilaration of serious driving, we offer the Thunderbird Turbo Coupe. Superior equipment and sleek comfort combine to create a car that runs with the best in the world.

Consider the equipment: a 2.3 liter turbo-charged, inter-cooled engine. Electronic fuel injection. Four-wheel power disc brakes with a sophisticated Anti-lock system. Automatic ride control suspension with rear quadra-shocks. Traction-Lok rear axle. Hella® fog lamps. Special 16" aluminum wheels. And more.

Consider the interior: articulated adjustable sport seats. Adjustable power lumbar support. Electronic AM/FM stereo. Full instrumentation including turbo boost gauge. And more.

You may find cars with some of these features, but it'll be tough to find a world-class touring car with all of them at the Thunderbird Turbo Coupe's price. Take one for a test drive at Honolulu Ford. It could be the car of your life.



Honolulu Ford
Ford Isuzu Alfa

711 Ala Moana / Phone: 523-8200

(Continued from page S-8)

the distinctive Pontiac flair. Pontiac LeMans for 1988 — a new entry in the subcompact car market that combines outstanding German design and engineering, Korean assembly quality and distinctive Pontiac attributes of sporty, road-handling performance and fun — excitement in the Pontiac tradition. See it now at your local Pontiac dealers.

Nissan Revolution

There is a revolution going on in the automobile industry, with new approaches to old problems, and new applications of new technology that are dramatically altering industry expectations of the automobile. That revolution is the one being wrought by the wonders of electronics. Nissan has always been a leader in the field of automotive electronics, being the first maker in Japan to introduce electronic engine management (ECCS), the first to introduce cockpit switchable dampers, and the first with such safety and convenience related features as the drowsiness monitor and automatic raindrop-detecting wipers. And Nissan continues at the forefront of developments in electronics for the car.

Electronics contribute to improved efficiency, convenience, comfort, safety, and reliability. And with electronics, whole new worlds are opened up. Just as electronics can be used to automate, so they can be used to intervene and help in man's relation to the car's mechanical components, to overcome the limits of purely mechanical compromises.

As an example of its technological advancement, Nissan is currently considering the introduction of a "Supersonic Suspension System" in the 1988 model year. This technically advanced electronic suspension is a system that automatically adjusts shock absorbers damping in reaction to driver inputs and by "reading" the road ahead of a vehicle with an ultrasonic transceiver. This system has two modes: auto and manual. In the auto mode, the damping force of the shock absorbers automatically changes to the three settings — (SOFT, MEDIUM OR FIRM) — de-

pending on road and driving conditions monitored by supersonic wave sonars that measure ground clearance, steering wheel sensors that measure the turning speed of the steering wheel, and by braking sensors and speed sensors.

In addition to the fully automated suspension adjustment mode, the driver also has the option of selecting the SOFT, MEDIUM, or FIRM settings manually.

Nissan has grown steadily on the strength of its product innovativeness and will continue to be a technological leader in the automobile field in the future.

How To Buy A New Car

"Ask The Man Who Owns One," went the Packard automobile advertising of the 1930's: While perhaps helping to account for the demise of Packard, the slogan is still the best way to find out about new cars.

A new car is the third largest purchase most people ever make, led only by homes and college education, and it can be a difficult and agonizing process. Comparisons in magazines and newspapers are plentiful, but the best test is to talk to current owners.

Only current owners can tell you about the car's quality, about the service, about what the warranty really means. In fact, owner satisfaction may be the single most important information in the industrywide J.D. Powers Research. It tells you how current owners actually feel about their car purchases, so it's probably a good guide as to how you'll feel.

Some automobiles, according to Powers Research, consistently rank highest in owner satisfaction. BMW, Mercedes-Benz, and Subaru are in the top ten year after year.

Subaru, which has ranked in the top ten for owner satisfaction since its introduction, says the secret is value and quality, which justify the purchase price. This price/value equation, says Subaru, is vital. Next in importance, says Subaru, is service.

It is only the previous owners, the ones who rank Subaru and others consistently high in owner satisfac-

tion, who can provide a guide to buying a new car. The next time you face this difficult task, make it simple. Ask the person who already owns one.

Honda Windward is Top Gun

Servicing your Honda has always been a top priority at Honda Windward, on Kamehameha Highway near Likelike. That commitment has earned their service coordinator, Onesie Unga, the rank of Honda Top Tech. He is the only one in the State to win the prestigious title through extensive training and competition.

Honda Windward is also Top Gun in customer satisfaction. According to the most recent Honda survey, the nine year old dealer is number one on Oahu for the second time in a row.

"Part of that positive response from the community is due to extra conveniences we offer," said General Manager, Greg Goodwin. "Honda Windward is the only Honda service department open Saturdays. And our Early Bird service lets customers drop off their car before the service department opens. In most cases we'll have it ready that same day."

As part of the Lucas Dealership Group based in San Jose, Honda Windward has earned a reputation for highly competitive prices, large inventory and straight talk.

"Honda Windward now sells more than half our cars to people living far outside our Windward neighborhood," continued Goodwin. He believes, "when you offer a genuine value and stand behind your word, people will go out of their way to do business with you."

Blending people with computers

The results of high technology are evident in every Buick built today, from the peppy 2.0 liter Skyhawk to the experimental fuel-injected aluminum-headed V-6 Wildcat.

Using a perfect blend of people and computers, our factories are creating cars that incorporate front-wheel drive for better driving con-

(Continued on page S-16)

INTRODUCING . . .

The Royal Hawaiian Buick Dealers

A new dealer group with an old-fashioned
way of doing business: with pride.

For nearly 85 years, the name of Buick has been associated
with tradition, substance and pride. Those same values are held by the
Royal Hawaiian Buick Dealers. We feel the old-fashioned way of
doing business is still the best way. We think you'll agree.



1987 BUICK SOMERSET



1987 BUICK REGAL

Schuman Carriage Co., Ltd.
Honolulu

Hawaiian Motors, Inc.
Hilo and Kona

Kuhio Motors
Kauai

Haleakala Motors
Maui

**If you're not driving a Jeep
you're not having fun...**



**Renault/Jeep
PERFORMERS**

CUTTER

AMC/JEEP-RENAULT

1880 Main St.
Wahiawa, HI 96786
245-7433

COURTESY

AMC/JEEP-RENAULT

1391 Kapiolani Blvd.
Honolulu, HI 96814
946-8311

CUTTER

AMC/JEEP-RENAULT

WAIKAPU
94-448 Farrington Hwy.
671-2626

**KAUAI
AUTO CENTER**

3156 Hoolala St.
Lihue, HI 96766
245-4788

Members of the Hawaii Dealers Association

(Continued from page S-13)

trol, roomier interiors, computer-controlled fuel injection systems, and even an array of superior sound systems. Body robots assemble and weld Buicks to precise tolerances while paint robots spray primer, paint, and clear enamel. At the same time, there are certain things, like wet-sanding primer coats, that can only be done with the critical eye and practiced touch of a human being.

People are working with expanded technologies, and actually styling an automobile around them. The Wildcat, an experimental engineering prototype, is a living laboratory where new technologies like all-wheel drive and computerized suspension systems are being tested, and turn into reality. In a matter of years everything will be controlled by advanced electronics, and your car's performance will exceed your wildest expectations. The very best ideas, like those incorporated in the Wildcat, will be turned into the Buicks of tomorrow. At Buick, better really does matter.

Mercedes-Benz '87

With five new gasoline and five new diesel models added to its 1987 lineup, Mercedes-Benz now offers Hawaii's buyers a selection of five 190 sedans, three midsize sedans, a station wagon, three long-wheelbase "S Class" sedans, a limited-edition and a coupe/roadster, according to Bill Shafer, President of TheoDavies Euromotors, Hawaii's exclusive Mercedes-Benz dealership.

From the standpoint of performance, the principal new is the 190E 2.6 sport sedan, which utilizes a slightly smaller version of the advanced six-cylinder engine that powers the widely acclaimed 300E midsize sedan. Its fuel-injected 2.6-liter engine is rated at 158 hp and moves it from zero to 60 in 9.1 seconds with an automatic transmission. Its diesel counterpart is the 190D 2.5 Turbo with a new five-cylinder engine, making it one of the quickest diesels ever built.

Of the three new midsize models, all have six-cylinder engines. The 260E sedan is a blend of the 190E 2.6 and the larger 300E. It uses the same

body as the 300E, but has slightly less power and standard equipment, resulting in a lower price. For those who like the size and aerodynamics of the 300E there is also the 300D Turbo. Like all Mercedes diesels, it has an encapsulated engine compartment to reduce the noise. The 300D Turbo combines gasoline-engine smoothness and responsiveness with 30-mpg fuel economy.

The 300TD Turbo station wagon is an all-new vehicle that incorporates not only the clean look of the midsize sedans but their basic suspension system as well, adding hydropneumatic self-leveling at the rear to maintain ground clearance.

All but two Mercedes-Benz models include ABS anti-lock brake system as standard equipment, and it's an optional feature on those. The SRS, or Supplemental Restraint System, which includes a driver-side air bag and emergency tensioning front seat belts, is standard on all models.

Four-Wheel Steering

Mazda Motor Corporation announced it will introduce a unique, active four-wheel-steering system as an option on selected 626 passenger car models.

The system will be available beginning this summer in the Japanese domestic market, and later this year in the U.S. It will also be a highlight of a new Mazda international size passenger car to be introduced this year.

Four-wheel-steering utilizes all four wheels to steer the vehicle when it is being turned. Mazda's 4WS system is unique because of its speed-sensing capability; the direction and amount of the rear-wheel steering angle during cornering is determined not only by the driver's input to the steering wheel, but also by electronic controls which measure and respond to the vehicle's speed.

The driver's input to the steering wheel is mechanically transmitted by the rotation of a shaft which connects the front and rear steering systems. The rear steering system incorporates a mechanism to transform the steering input and an electronic system to control it.

During cornering at speeds over 22

miles per hour, the rear wheels are steered in the same direction as the front wheels to provide improved handling and stability compared with conventional two-wheel-steering vehicles. When maneuvering at speeds lower than 22 mph — such as when parking the vehicle — the system steers the rear wheels in the direction opposite from the front wheels.

The electronic system with sensors regulates the steering ratio between the front and rear wheels according to the vehicle's speed to optimize the vehicle's dynamic characteristics at any speed.

Mazda's advanced 4WS system facilitates vehicle handling at high speeds and helps to reduce driver fatigue in sustained driving at highway speeds. Its responsive and precise steering characteristics also enhance driving excitement for the enthusiast.

Advantages of Mazda's Four-Wheel-Steering System

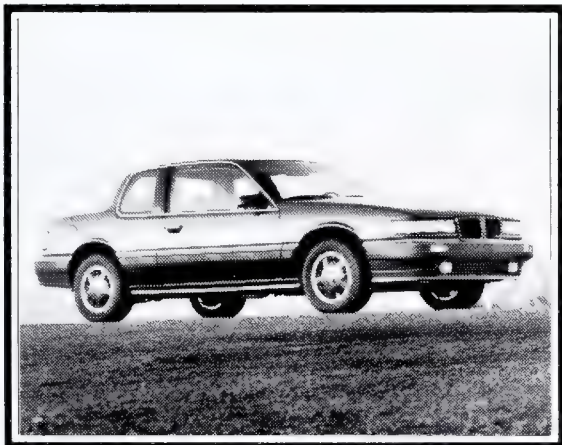
- *Cornering Capability*
The vehicle's cornering behavior becomes more stable and controllable at high speeds as well as on wet or slippery road surfaces.
- *Steering Response*
The vehicle's response to steering input become quicker and more precise throughout the entire speed range.
- *Straight-Line Stability*
The vehicle's straight-line stability at high speeds is improved; road irregularities and crosswinds on the vehicles stability are minimized.
- *Lane Changing*
Stability in lane changing at high speeds is improved. High-speed slalom-type operations become easier, and the vehicle becomes less likely to go into a spin even in situations when the driver must make a sudden and relatively large change of direction.
- *Low-Speed Maneuverability*
By steering the rear wheels in the direction opposite of the front wheels at low speeds, the vehicle's turning circle is greatly reduced. Therefore, maneuvering on narrow roads and parking becomes easier.

We Build Excitement...



in Korea!
for under \$6,000.00*

The new Pontiac LeMans...designed and engineered
in Germany and quality-built in Korea.



PONTIAC *WE SELL EXCITEMENT*

The HAWAII PONTIAC DEALERS ASSOCIATION

- Courtesy Pontiac
- Hilo Motors
- Haleakala Pontiac
- Kuhio Motors
- Mike Salta Pontiac

* Manufacturers suggested list price \$5,995

Dealer added options, tax, license, freight and documentary fees may affect actual selling price.

Subaru of Hawaii had a choice:
To reduce factory prices,
or produce a slick ad.

Obviously, we chose to reduce manufacturer's
suggested retail prices by up to \$1,500.
And we've also increased the limited
powertrain warranty to 7 ~~xxxx~~ years/70,000
miles.

Two ~~xx~~ good reasons to stop reading this
ugly ad and go test drive a beautiful
Subaru.

Even ^{more} SUBARU
Inexpensive. And built to stay
that way.

AL TAKAHATA SUBARU
Nimitz Hwy./538-0836

PEARL HARBOR SUBARU
Waipahu/677-0777

ISLAND SUBARU
Kahului/877-0031

SUBARU HAWAII
Hilo/935-3741

SCHUMAN CARRIAGE CO.
Honolulu/533-6211

SUBARU KANEHOE
Kaneohe/235-8744

KAUAI AUTO CENTER
Lihue/245-4788

SUBARU HAWAII
Kailua-Kona/329-4408

1988 CORSICA



1988 BERETTA



AT LAST.

The people who designed these two cars must have
had Hawaii in mind.

Put one on the road in *your* neighborhood.
Drop by your nearest Chevy Dealer's.



CHEVROLET DEALERS ASSOCIATION

JN Chevrolet

2999 N. Nimitz Hwy.
Honolulu, HI 96819
836-1222

Rainbow Chevrolet

1341 Kapiolani Blvd.
Honolulu, HI 96814
528-1720

Service Motor Co. Wahiawa

105 S. Kam Hwy.
Wahiawa, HI 96786
622-4195

Waipahu Auto

94-729 Farrington Hwy.
Waipahu, HI 96797
671-2871

Hawaii Motors

1177 Kilauea Ave.
Hilo, HI 96720
961-5222
and
Kuakini Hwy.
Kailua Kona, HI 96745
329-2987

Haleakala Motors Ltd.

260 Hana Hwy.
Kahului, HI 96732
877-2066

The CUTTER TEAM

HAWAII'S DRIVING FORCE

Class of '88



CUTTER

DODGE

DIRIGENT
KAPAHULU

PEARL CITY
521 Kono Hwy
808-437-1111

CUTTER

AMC JEEP-RENAULT

KAPAHULU
2141 Kono Hwy
808-262-1111

CUTTER

NEW CARS

1988 CARS
KAPAHULU
808-262-1111

USED CARS

1988 CARS
KAPAHULU
808-262-1111

CUTTER

NISSAN

KAPAHULU
2141 Kono Hwy
808-262-1111

COURTESY

PONTIAC-AMC JEEP-RENAULT

1988 CARS
KAPAHULU
808-262-1111

CUTTER

FORD-ISUZU

KAPAHULU
2141 Kono Hwy
808-262-1111

(Continued from page 238)

Relaxation/Biofeedback group. When T tests were performed, none of these means were significantly different from each other.

The research design consisted of two treatment programs. In the Relaxation group, the seven received a six-week, one-hour-a-week, relaxation training program, employing an audio-cassette relaxation tape.¹⁰ In the Relaxation/Biofeedback group, the four members obtained a six-week therapy program involving both relaxation training and biofeedback procedures. (A few dropouts led to the unequal number in the two groups.) During the biofeedback procedures, the subjects were trained to utilize electrodermal feedback while relaxing, with the goal of lowering their galvanic skin response (GSR) levels.

At the first and last treatment sessions, all subjects responded to a questionnaire eliciting demographic information and handsweating history. The subjects also responded to the State-Trait Anxiety Inventory (STAI)¹¹ and to the Locus of Control Scales (LOC).¹² In addition, the palmar galvanic skin response (GSR) levels were obtained at the start of the session and following relaxation instructions. The biofeedback apparatus that provided the GSR readings in microvolts during the biofeedback training was the SPR P505 by Cyborg. Finally, the subjects were asked to provide subjective ratings of handsweating. The handsweating rating required patients to rate how severe their sweating was on a scale from 0 ("dry") to 10 ("very wet").

Results

The mean and standard deviations for the Relaxation and Relaxation/Biofeedback subjects at pretreatment and post-treatment levels are presented in Table I. The pretreatment scores of the two groups of subjects for all six measures of personality, GSR and handsweating rating were not significantly different.

To determine if there was improvement following treatment, pairwise comparisons of pre- and post-treatment scores were made for both treatment groups. No significant changes in the personality measures (State Anxiety, Trait Anxiety, Locus of Control) were observed.

The Relaxation subjects lowered their GSR readings in the predicted direction, but the changes were not statistically significant. The Relaxation/Biofeedback subjects showed a significant pre- to post-treatment lowering of GSR levels for the baseline ($t = 8.76, p < .01$) and relaxed ($t = 3.35, p < .05$) measures following treatment.

Subjective ratings of handsweating decreased in the predicted

direction for both treatment groups, with the changes approaching statistical significance. The Relaxation subjects showed a decrease in their handsweating self-ratings from the first to the last session ($t = 2.42, p < .06$), as did the Relaxation/Biofeedback Ss ($t = 3.88, p < .06$).

Discussion

The present study yielded two noteworthy findings: (1) Hyperhidrotic patients who were provided GSR feedback combined with relaxation instructions were able to reduce their skin conductance levels significantly from their pretreatment levels, while those who received only relaxation training showed no change in their pre- to post-treatment GSR levels; and (2) based on self-reports of handsweating, both treatment groups did equally well in alleviating palmar hyperhidrosis, with changes approaching statistical significance.

The outcome for these 11 subjects is considered impressive in light of the fact that they had fairly long histories of hyperhidrosis and had been non-responsive to varied intervention procedures. It would, of course, be essential to follow-up on these individuals to see whether the improvement persisted over time.

The present findings, with similar outcome in both treatment methods, suggest that relaxation is a primary ingredient in effecting beneficial changes and that the inclusion of biofeedback training provides no additional therapeutic benefit. These results are consistent with the conclusion of Duller and Gentry⁸ whose hyperhidrotic patients reported the increased ability to relax as the reason for the reduction of their sweat response. However, without a control group in our study, it is not possible to rule out other influences, such as expectancy factors or placebo effects.

Not all the patients responded equally well to the relaxation techniques employed in this research. Like other psychophysiological disorders, hyperhidrosis appears to respond to varied psychological approaches, including assertiveness training, systematic desensitization and instrumental conditioning.^{7, 13}

In view of the preliminary nature of the present findings, it would be desirable to compare relaxation training with other behavioral techniques, including skin temperature biofeedback, to determine the most effective and cost-saving approach to the treatment of hyperhidrosis.

The employment of psychological tests to offer insight into the role of anxiety or attitudinal factors was unproductive. Comparison of pre- and post-treatment measures of anxiety and locus of control scores revealed no significant changes following

TABLE I
Mean and Standard Deviation of
Pre- and Post-Treatment Measures

Measures	Relaxation				Relaxation/Biofeedback			
	Pre-		Post-		Pre-		Post-	
	M	SD	M	SD	M	SD	M	SD
State Anxiety	32.00	8.37	29.29	7.13	39.75	10.34	38.00	7.96
Trait Anxiety	35.14	8.17	32.86	9.12	37.25	5.38	36.56	5.20
Locus Control	6.33	2.50	6.29	2.75	8.75	4.27	7.75	6.08
GSR Baseline	0.66	0.72	0.22	0.39	0.65	0.11	-0.13	0.14
GSR Relaxed	0.60	0.48	0.26	0.49	0.78	0.28	0.11	0.27
Sweat Rating	5.43	2.51	2.67	1.03	7.75	1.50	3.33	1.53

relaxation training, with or without biofeedback therapy. It may be that these test instruments were not sufficiently sensitive to reflect changes in the subjects or that decrease in handsweating has no relation to anxiety or self-control orientation.

This investigation is considered a preliminary attempt to assess the efficacy of behavioral techniques in reducing hyperhidrotic symptoms. There were notable limitations in the research design because of the small number of volunteer subjects, the absence of controls and the lack of long-term follow-up data. Future studies overcoming these flaws are strongly desired.

ACKNOWLEDGMENT

This research was supported by the Pacific Health Research Institute. The authors are indebted to PHRI for its assistance.

REFERENCES

1. Herxheimer A: Excessive sweating: A review. *Trans St John's Dermat Soc*: 40:20-25, 1958.
2. Juhlin L, Hansson H: Topical glutaraldehyde for plantar hyperhidrosis. *Arch Derm* 97:327-330, 1968.

3. Grice K: Treatment of hyperhidrosis. *Clin & Exp Derm*: 7:183-182, 1982.
4. Levit F: Treatment of hyperhidrosis by tap water iontophoresis. *Cutis*: 26:192-194, 1980.
5. Dobson R: Hyperhidrosis, in Demis DJ, Crousne RG, Dobson R, McGuire JS (eds): *Clinical Dermatology Vol. 2*. Philadelphia, Harper and Row Publishers, 1985, Section 9A-3.
6. Sheh C, Wang Y: Thoracic sympathectomy for palmar hyperhidrosis. Report of 457 cases. *Surg Neurol*: 10:291-296, 1978.
7. Bar LHJ, Kuypers BRM: Behavior therapy in dermatological practice. *Brit J Derm*: 88:591-598, 1973.
8. Duller P, Gentry WD: Use of biofeedback in treating chronic hyperhidrosis: a preliminary report. *Brit J Derm* 103: 143-146, 1980.
9. Harris J, Sieveking N: Case study in hyperhidrosis. *Amer J Clin Biof*: 2:31, 1979.
10. Cannistrasi A: Autoinduction procedure for relaxation. New York, Bio-monitoring application, 1975.
11. Spielberg CD, Gorsuch RL, Lushene RE: *Test Manual for the State-Trait Anxiety Inventory*. Palo Alto, Calif., Consulting Psychologists Press, 1970.
12. Rotter JB: Generalized expectancies for internal versus external control of reinforcement. *Psychol Monogr: Gen Appl*: 80:1-28, 1966.
13. Cotton DWK, Kuypers BRM: Treatment of hyperhidrosis by conditioning. *Dermatologica*: 146:371-372, 1973.



Robert T. Wong, MD

The Catalyst Model

We have in our medical midst a catalyzer, one who makes things happen.

What has happened is an annual lectureship at our university's School of Medicine that has brought to Hawaii prestigious medical scientists, leaders in the forefront of innovative approaches to the resolving of tough medical problems that affect the health of all people. This very special event bears the name of The Robert T. Wong, MD, Lectureship.

In 1985, it was Gallo, the co-discoverer of the HIV as the cause of AIDS. In 1986, Lansing of Humana described his work with the Jarvik-7 artificial heart, and in April this year it was Steven Rosenberg, MD, PhD, from the NCI in Bethesda who described his innovative approach to cancer treatment with his "Adoptive Immunotherapy" using lymphokine-activated killer lymphocytes mixed in with Interleukin-2.

Who has made this happen? Our own senior ophthalmologist Robert T. "Bob" Wong, MD, of course.

Before we delve into how Bob Wong became "the catalyzer",

let's examine the man: Where did he come from, who is he and how did he happen to fill this role?

Bob has been practicing medicine for 51 years — he still is — still in the same location in downtown Honolulu where Union Mall now joins Bishop Street. He is 76 years old.

His father, Wong Hing, came from China as a young man to work on the sugar plantations of the Big Island, but only for a short while. He became the cook for the Lyman family in Hilo and then went out on his own as the proprietor of Planters Market and of a small leasehold ranch in Olaa. He married a girl from Waianae on Oahu and they raised 15 children, of whom 12 are surviving. Bob was number three and Jimmy Wong, Ob/gyn in Honolulu, was number five, the only two who became doctors, although all were well-educated.

Bob was born in Hilo, went to Hilo High School and then the University of Hawaii from which he graduated in 1932. He went

(Continued on page 262)



**The best doctors get sued.
We protect you.
We know how.**

Let us tell you how we do it.



Medical Insurance Exchange of California
Professional Liability Exclusively

6250 Claremont Avenue, Oakland, California 94618-1324

Call MIEC's Honolulu Claims Office, 545-7231, or call toll-free 800-227-4527

on to Jefferson Medical College in Philadelphia, graduating in 1936 after winning the gold medal in physiology and becoming a reserve officer in the U.S. Army. After 27 months of a rotating internship at Jefferson Medical College Hospital, he put in a year of active duty with the military and then went back to academia, and then to a residency in ophthalmology at Cleveland City Hospital. He was granted a master of medical science degree by the University of Pennsylvania in 1946.

Although on inactive duty status, Bob was assigned to the Western Reserve Unit, the 5th General Hospital. He missed going overseas to Brisbane, Australia, with the unit early in 1942, when it was activated, because he came back to Hawaii in July 1941 at the end of his residency training. He was in Mabel Smyth together with others of the HCMS on Sunday morning, December 7, 1941, when the Japanese fleet attacked Pearl Harbor. The doctors were immediately given assignments to duty by the head of the Civil Defense, Bob Faus, MD, who was conducting the meeting at the time, and Wong found himself at Queen's drawing blood for the blood bank for the next several days. Henry Dixon, Faus' deputy, later assigned Bob to a small, makeshift army hospital in a school at the corner of 19th and Waialae in Kaimuki, to prepare for casualties in case of a Japanese invasion that never materialized.

Bob had opened an office for the private practice of ophthalmology on Union Street in September of 1941. So, for a year, he divided his time between his own practice and the military. He served as ophthalmologist to both the Alsup and the Fronk Clinics next door. In those days, the only other ophthalmologists in Hawaii were F.J. Pinkerton, Cowan, Holmes, Robert Lee, Moffat, Trexler and Minatoya.

Wong was appointed a consultant to the leprosarium at Kalaupapa, Molokai, in 1946 and he used to fly over frequently until 1950, after which he served the lepers at Hale Mohalu in Honolulu until its demise a few years ago.

Bob had met Harriet Leong, the sister of his college classmate, and they were married in 1934. Bob's satisfaction in having their two sons follow in their father's footsteps is patently manifest. Stephen, born in 1946, is professor of ophthalmology at Temple; Bradley, born in 1950, is a general surgeon in Honolulu. The father and two sons make an imposing picture in their American College of Surgeons formal trappings, as a threesome.

Robert Wong was president of the Hawaii Chapter of the ACS in 1961 and of the Honolulu County Medical Society in 1965. He became intensely interested in the idea of a medical school at the University of Hawaii, but let us tell the story in his own words:

"At the height of his regime, Governor Burns decided to expand the University. He was informed that the only recourse lay in the expansion in the field of biological sciences. In 1964, Dr. Allen B. Richardson (senior) and I were invited to lunch at Ciro's with the then UH president Hamilton and his legal counsel Kenneth Lau. When we were overcome with too much wine and delicious servings of shrimp scampi and pasta, my longtime friend Kenneth Lau asked what we thought of a 2-year medical school at the UH. Without hesitation and with no thought to protocol, Richardson and I gave the two of them our personal approval. At the time, Richardson was president-elect of the HMA and I was president-elect of the county medical society. Within a week, we received letters thanking us for 'pledging the support of the medical community'! A short time later, the remarkable Terrence Rogers, PhD, chairman of the University's Depart-

ment of Physiology, was appointed as a task force of one and ordered to proceed with the creation of the school of medicine.

"Dr. Windsor Cutting, former Dean of Stanford Medical School, was selected as the Dean of the new school. A feasibility study was processed and within a short two or three months a quonset hut was moved to the northeast corner of the university campus. A professor of anatomy and a professor of pharmacology were appointed; the quonset hut was listed as the Department of Anatomy and Biological Research Building, and the medical school was formally dedicated. The first Professor of Medicine was Richard Blaisdell, MD.

"By contrast, the Hershey School of Medicine of the Pennsylvania State University had taken nearly ten years to plan, and had required almost a hundred million dollars to construct. Even so, it nearly failed of fruition, had it not been taken over by the State University.

"Without any funding from the State of Hawaii, Task Force Rogers almost singlehandedly, with a little help from the NIH, brought into being the UHSM. The final miracle performed by Dr. Rogers was to obtain the necessary certificate of accreditation, which was granted with almost no reservations.

"The primary reason for the existence of this medical school is to raise and maintain a high standard and quality of medical care in the State of Hawaii."

From a deep sense of obligation to his parents and to his brothers and sisters who had made sacrifices on his behalf, and to his own good fortune in having become a physician at the feet of Aesculapius in Philadelphia, Bob Wong has devoted himself to supporting the John A. Burns School of Medicine these past 20 years. However, he has jumped ahead and he is now quite enthused over the success of the current annual lectureship program which has furthered the original purpose of the establishment of the medical school, i.e. to elevate the standard of medical care in the community. We quote from Bob once more:

"I have supported the medical school since its inception. My lectureship, however, was established as the result of an unusual chain of circumstances. Several years ago I helped a young man gain admission to Jefferson Medical College. Subsequently, his grateful mother Jean Wong, a dedicated academician, died and in her legacy left \$15,000 at the UH School of Medicine in my name. In 1984 I matched that initial contribution in order to start the Fund. Since then it has grown to over \$200,000, thanks to gifts from other friends and colleagues, and in particular a major contribution from the estate of Beatrice Watson Parrent. The lectureship has created an important annual scientific contribution to medicine in Hawaii."

Robert Wong, the catalyzer, is particularly pleased that as a result of Dr. Gallo's visit to Hawaii in 1985, the Blood Bank of Hawaii began to test every donor for AIDS, thus assuring its non-transmissibility via blood transfusions (which very likely may have happened before then.). He is pleased that Dr. Lansing's visit may have helped inspire Livingston Wong and Ricardo Moreno to proceed with the first heart transplant in Hawaii recently, and Bob is hoping that Rosenberg's lecture may stimulate cancer research in Hawaii to greater heights.

With Bob as a model, perhaps others in the profession will become similarly imbued with an urge to establish forever living memorials.

J.I. Frederick Reppun, MD
Editor

This is My Mana'o

Some members of the HMA Council heard them twice, and about a hundred physicians, mostly members, heard them once: The knowledgeable threesome from the Medical Insurance Exchange of California, William Scheuber, its president, Steve Stimel, MIEC's medical malpractice claims specialist, and Ron Neupauer, its underwriting manager, on Friday, May 22, 1987.

They had bad news for Hawaii holders of MIEC's Medical Malpractice Insurance (MMPI) policies. As virtually the only major carrier of MMPI in Hawaii, MIEC has had to make application for a rate increase that is 37% above and beyond the expected 25% increase to become effective this Aug. 1st. The reasons for this were made very obvious to us who listened.

Perhaps No. 1 was that MIEC entered the Hawaii market in 1981 and offered claims-based-on-occurrence (alleged incidents occurring that insured year) at a rate that has since turned out to have been woefully inadequate. For example, "from 1981 through 1983, MIEC took in premiums totaling \$858,292, as against incurred losses totaling \$1,820,967 to date and more claims for occurrences in those three years still coming in."

Secondly, in those early years the policies were for low coverage, the excess above \$100,000 and later \$200,000 supposed to have been covered by the State-legislated Patients Compensation Fund (PCF). Early in 1984, the State Legislature repealed the law setting up the fund, leaving both plaintiff and defendant high and dry.

Thirdly, the Hawaii experience in both number of claims and in the amount of damages awarded shot up dramatically and unexpectedly, surpassing MIEC's overall experience in its five-state jurisdiction wherein it sold its policies — Alaska, California, Hawaii, Idaho and Nevada. By contrast, California's experience of 12 years has leveled off to the point where MIEC is now paying its doctors in that state dividends.

We were shown convincing figures and graphs confirming this bad news, data reportedly actuarially sound and determined by independent experts in the field.

Perhaps the most cogent figures given to us were that, in 1982 and 1983, claims came in to MIEC at a rate of one a month. In 1984 this rose to 3.4 a month and in 1985 it was 5.6 a month. Incredibly, in the first four months of this year, the rate of claims being reported has jumped to 11 per month! Despite factoring in the increase in policyholders the result of Argonaut's pullout, it is estimated that this increase by the end of 1987 will amount to 88% above that of 1986. This contrasts adversely with the MIEC overall increase of 10%, and California's 8%.

In addition, the figures show that the average cost of Hawaii claims over the six-year period since 1981 is \$26,609 per claim, which is 37.6% higher than California's with its 12-year experience reported.

This is the Hawaii experience that MIEC says it cannot continue to support and that the other four of its constituent states will not want MIEC to underwrite further, and understandingly so. In short, Hawaii can no longer be a burden on and be subsidized by the other states.

We who listened to the MIEC representatives learned much more.

Any risk above the \$400,000 mark is shared by all the five states together through umbrella insurance that MIEC buys, whereas amounts of claims awarded or settled under that figure are covered intrastate. It was also explained to us that written in to the formula is a 23% added income from investments that MIEC takes in. And, as of August 1985, no further sale of "occurrence" policies were being written; only "claims made"

policies are offered to physicians now, but the "tail" in policies written in the early years will continue to plague MIEC because of its miscalculation as to how much it should have charged in premiums then.

MIEC is a physician-run, nonprofit insurance company built in California as a result of the 1975 MMPI "crisis." If its intake of premiums plus its income from investing those premium dollars surpasses what MIEC pays out in awards and in its costs of defending against claims, then "dividends," which are actual refunds of overpayment of premiums, can be returned to policyholders. An insurance company cannot go on doing business if it pays out more than it takes in. However, the corollary is also obvious: If MIEC's investments coincide with a general period of high interest (= inflation, which is bad for most people!), then it has somewhat of a fatter cushion against losses from claims. This cannot be factored in precisely because it, too, is unpredictable, as are the claims themselves.

Finally, we learned that our so-called tort reform legislation, here in Hawaii earlier this year, "was no tort reform at all!" in Stimel's words. Had legislation been as specific and effective as it was in California, namely meaningful in terms of (a) a cap on pain and suffering awards, (b) control of contingency fees, (c) allowances made for collateral sources of coverage, and (d) allowance for periodic payments over time, then MIEC would not have had to factor in the current limitless costs.

The MIEC representatives made no bones about crediting California's tort reform package with the leveling off of the number of claims and the amounts of damages in that state. They could not come up with any other major factor to explain the downtrend in a state that had once been at the top of the "crisis" pile-up 12 years ago.

It was also a surprise for us to hear that Hawaii is considered to be "soft" on plaintiffs' attorneys, or rather that sued physicians and their defense lawyers are too prone to give in, to settle without a fight, to pay off the plaintiff *without* justice being served. "Settling a winnable case just to get rid of it may be cheaper in the short term, but it is conducive to more claims being filed in the long run," the three insurance experts repeated severally and in unison. In short, it was Hawaii's experience and Hawaii's litigious climate that is now coming home to roost. The HMA, in the vanguard of the attack on the Legislature to bring about badly needed tort reform for the benefit not only of all Hawaii physicians but of their patients, the general public, as well, was exhorted to work even harder for it at the next legislative session. We were strongly advised to solicit the participation of our patients on behalf of their doctors.

It is my mana'o — while cogitating on the terrible impact of this issue on the practice of the healing art and on the formerly sacred trust embodied in the doctor-patient relationship — that insurance, per se, compounds the problem.

By fighting for tort reform, the medical profession is treating the symptoms rather than the disease itself. We are being diverted in the direction of "cost control" instead of reducing "malpractice" (which is analagous to the Superpowers attempting to thrash out "arms control," instead of agreeing on "disarmament"!). Those physicians who can easily purchase MMPI of high coverage, have less of an incentive to avoid high risks, whereas those who are the least able to afford minimum coverage must practice careful medicine perforce. The insurance fund is not only the "pot of gold" that entices plaintiffs to dip their hands into it in hopes of getting at least something for their

(Continued on page 275)

REAL ESTATE OPPORTUNITIES



DIAMOND HEAD OCEAN VIEW

Dramatic ocean views & sounds of the surf enhance this unique residence designed by noted architect, Bert Ives. With Diamond Head as a backdrop, one enters a walled & gated courtyard & pool area. Living room & large lanai open to gardens & ocean. 3 small bdrms/3 baths in main house. Separate guest house with private lanai. Fee Simple MLS 34922.....\$1,900,000

Call Caroline Vann (R) 942-2521

Bradley
PROPERTIES LTD.
(808) 523-0456

1177 Kapiolani Blvd., Honolulu, HI 96814

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY

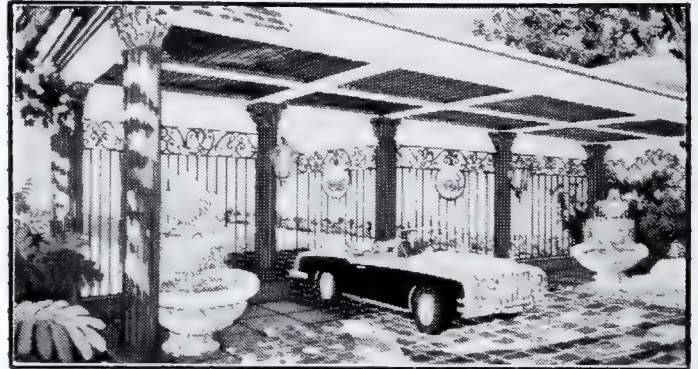


PAIKO OCEANFRONT

4 bedroom, 3 bath home completely rebuilt with the highest attention to quality and designer details. Includes ultra modern kitchen, formal dining room with wet bar, sunset room, family room, fireplace and pool. Enjoy magnificent views from the secluded location. Fee available! (36798) \$895,000 (L)

Vivian Fagan (R) 373-2351

Libbe & Company



THE WAIALAE PINNACLE



Just fifteen minutes from downtown Honolulu lies one of the most spectacular developments on the island of Oahu. Five magnificent homesites surrounded by lush preservation land. Each homesite with unsurpassed views and large enough to build your true dream home. Electronic wrought iron gates open onto cobblestone courtyard reminiscent of a Roman piazza. Palatial walls, dancing fountains and beautiful landscaping make this project a paradise in paradise.

Design your own home or we will design and build for you.

Homesites start from \$440,000 (fee simple)

1060 Young St.

523-1381

Hono., HI 96814

SCULLY ROGERS LTD. PRESENTS



HAWAII'S MOST PRIZED PROPERTY OCEANFRONT FEE SIMPLE

THE MAGIC OF MALAEKAHANA. OAHU'S MOST PERFECT BAY. QUIET. SECLUDED. 1.27 ACRES IN FEE SIMPLE. TO THOSE WHO KNOW AND SO APPRECIATE... A RARE, RARE FIND! NOW OFFERING A HALF INTEREST FOR ONLY.

\$225,000

Scully Rogers
LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 715, Honolulu, Hawaii 96815

REAL ESTATE OPPORTUNITIES



DIAMOND HEAD

Beautifully remodeled and tastefully redecorated 5 bedroom, 2 bath home. Tropical setting on the side of Diamond Head, with privacy. Marvelous entertainment area plus wine cellar. FEE SIMPLE.

\$695,000..... MLS 34556

TERRY ROWATT (RA),
Listor/Owner 923-7435

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

MALAEKAHANA BEACH RENTAL



Rent a luxurious 6 bedroom 4-bath home at Malaekahana Bay. This exquisite estate is one of the most beautiful country rentals on the **North Shore** and is perfect for a two-family vacation. The property can sleep up to 16 people and includes a car, paddle tennis court and outdoor spa overlooking the ocean. Call for brochure: **\$250 a day**

Nancy Bathen (R) 395-4565

HILL & CO.

specialists in fine residential properties

HONOLULU

373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821

REAL ESTATE SERVICES

Member: The Honolulu Board of Realtors and MLS
**A TOTAL STAFF — AND REALTY SERVICE
IN WAIANAE**



Anne White (RA)

Larry Hatfield (PB)
Madeline Mong (RA)
Doris Oshiro (RA)
Marie Hatfield (R)
Paul Carter (RA)
Sharon Moore (RA)
Bob Hoffman (RA)



Jill Johnson (RA)

Alberta Keamo (RA)
Arch Cook (RA)
Valerie Cook (RA)
Denise Martin (RA)
C. Gay Hatfield (RA)
Phyllis Perry (RA)
Renee Kamikawa (RA)

Call:
696-8415

PROPERTY OF THE MONTH

Fee Simple 2 bdrm. Penthouse
Makaha Shores \$145,000

HAWAII HATFIELD REALTY CORP.

85-833 Farrington Hwy., Waianae

SALES • VA/FHA • MANAGEMENT • NOTARY

Fantastic Investment Opportunity! 18-Hole Championship Golf Course - \$2,880,000

SALE INCLUDES:

- 1,000 acres of fee simple land
- Completely remodeled club house, pro shop, starter shack, maintenance building, 65 new Yamaha golf carts.
- Olympic size swimming pool
- 3,000 sq. ft. tennis facility
- Five, 3 bedroom homes
- Approximately 350 residential building lots already subdivided and ready for sale.
- Fresh water lake.
- Room for additional 500-600 residential lots and an additional 18-hole golf course.

REASON FOR SALE: Personal Family Tragedy
TERMS: Full price cash, closing on or before July 19, 1987.

LOCATION: Florida

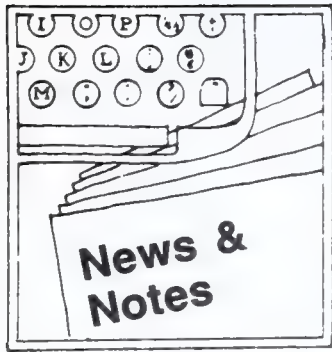
For further information call
Bill or Ginger Sinsabaugh (R)



Waterfront Properties
INC.

1188 BISHOP ST., #2407

531-5311



HENRY YOKOYAMA, MD

Life in These Parts . . .

Fifty-year-old Glen Silva went out for a loaf of bread to make a sandwich and nearly missed making medical history in Hawaii, i.e. of becoming the state's first heart transplant recipient . . . Anxious doctors and two daughters, alerted of a traffic victim donor (16-year-old Michael Benson) searched nearly five hours for Glen . . . Doug Bell, his physician, found him first . . . A 22-member transplant team led by Ricardo Moreno and including J.J. McNamara and Livingston Wong performed the historic five-hour operation . . . Silva, a widower of 13 years known as "Penguin," was already talking about revving up his prized '57 Chevy and doing some cruising. "First thing he says he wants," his daughter said, sighing, "is a blonde — tall, about 26."

Interesting Bumper Stickers:

- "Eat your desert first. It may be later than you think!"
- "BITCH — Beautiful Intelligent Talented Compassionate Honey."

A faded light blue Mazda GLC stationwagon with a prominent rear window sign, "Skydivers Hawaii," is driven by a bearded young fellow with dark glasses . . . License number "LOLO II" (Aha! He at least has insight . . . we thought). Then we noticed the license frame with the logo "Videololo"

Identity Crisis:

In February, Hilo GP Richard Williams had his license revoked and Honolulu OB/GYN man Rick Williams panicked . . . Rick Williams appeared in TV ads and circulated the following letter to physicians: "Dear Colleague: Williams is the third most common surname in the country, so many people have similar names . . . Recently a Dr. Richard Williams had his license revoked. He was a general practitioner in Hilo . . . I'm Dr. Rick Williams. For 15 years I have been a doctor in Honolulu specializing in gynecology, infertility, and surgery . . . Like all physicians my personal and professional reputation is very important, so I want to clarify this matter . . . To those of you who never doubted, thank you very much . . ."

Flak!

Our tough but well meaning Editor-in-Chief Fred Reppun penned us the following message

in bold red ink: "Henry . . . I know you can't teach an old dog new tricks, but — — — — — you are young! (True, Fred is 10 years older) 60's and 70's is written 60s and 70s, i.e. not the possessive but the plural . . . BPs vs. BP's . . . When you use dashes, type a space before and after — . . . For example is e.g. and not eg. . . . Pretty please! Put a new black ribbon in your peck machine! (Fred has a new word processor, which he pecks on with two fingers) Mabel and not Mable Smythe . . . Please, please, please — leave plenty of room at the top of pages . . . Aloha, Fred."

Friendly Flak!

Then along came the following letter dated March 25 from good ol' Harry Arnold Jr., our editor emeritus, now living in S.F., who chided gently:

"Dear Henry:

"They didn't spare much space for your column in the March issue of HMJ, so I read it all with my usual attention, and though I can understand and forgive your leaving an 'h' out of arrhythmias, after all these many years you should know that Mabel Smyth did not spell her last name *Smythe*. You did — twice. For shame!

"But I'll bet no one else complained — and for a short column it hasn't deteriorated a bit from your usual informative and witty style. I'm proud to know you, and very glad you didn't carry out the intention you once had — I remember it well! — of retiring. I'll bet a lot of readers still turn to 'News & Notes' first — I still do!

"I'm sorry to see that one of my iron-clad editorial rules has been abandoned: once on page 85, twice on page 86, twice on page 87, three times on page 88 patients are designated as 'x-year-old male' or 'x-year-old female' instead of a 'man' or a 'woman'. I enclose copies of a commentary that will appear in an early issue of the International Journal of Dermatology, excoriating this nefarious locution; you might pass one on to Fred, if you will.

"Anyway, I enjoyed your column, and I was sorry it had to be so shortened."

Aloha ka'ua!

Harry

"P.S. On second thought, I sent Fred a copy of this letter and a copy of the commentary. He needs it!" (Thanks Harry . . . Maybe an

old dog can still learn new tricks . . .) (The commentary, "Le Mot Juste," is reprinted with permission in this issue/Ed.) . . .

Bob Laird, Big Island pediatrician and volunteer medical director of the Ironman Triathlon had recommended that the Bud Light Ironman World Championship donate \$5,000 to the local March of Dimes . . .

Straub orthopedist Robert Medoff, who three years ago had pioneered and developed reconstructive knee surgery at the U of Tennessee using donor tendons and ligaments, successfully reconstructed a Michael Gailucci's knee using donor tissue from Michael Benson . . . Straub has established Hawaii's first orthopedic tissue bank for soft tissue and bone marrow . . .

In accordance with the recommendations of the surgeon general and the federal Center for Disease Control, state health director John Lewin announced plans for AIDS testing of individuals who received blood transfusions between 1978 and March 1985 . . . The plan was a joint effort of Lewin, blood bank director Julia Frohlich, HMA President Walter Chang, HMA Infectious Disease Committee chairman Steve Berman, and Linda Johnson . . . At-risk patients may go to any of the state Health Dept. HIV clinics for confidential testing by first calling 961-7276.

Sportsmen . . .

On Club Day at WCC, veteran golfer Kiku Kuramoto had a hole-in-one on the difficult 16th hole and won a New Yorker (which he promptly sold because he already owned one . . . Some guys are just born lucky . . .)

In the wake of the recent deaths of two prominent community leaders (Richard Kawakami, speaker of the House at age 56 and Adm. Jack Darby, age 50, jogger and commander of the U.S. Submarine Fleet of the Pacific), cardiologist-marthoner Jack Scaff says medicine is not doing a good job of spotting candidates for heart attacks . . .

"Since 50% of all deaths in the U.S. are due to heart attacks and when we include strokes, the rate goes up to two-thirds of all deaths . . . With proper screening, we can knock out 85% of premature deaths" . . . Jack has designed a "Personal Coronary Risk Factor Evaluation Form," a simple do-it-

yourself questionnaire designed for individuals without symptoms . . .

Hors de Combat

Much maligned Honolulu psychiatrist Carol Brown was acquitted of 134 counts of Medicaid fraud by Circuit Judge Wilfred Watanabe when the prosecution's evidence failed to specify the lengths of time she spent with patients . . .

Whereas Rex Couch, lab director at Wilcox Hospital and Kauai's only forensic pathologist, feels his job is fun and that he enjoys his job is obvious from his enthusiasm as he consults with other physicians about diagnoses . . .

One of his med-techs, Sheila Ueno, a veteran of 20 years, labels her work a "high-stress job" and feels that med-techs suffer from an "identity crisis" because they are in a non-recognized position . . . (Whatever that means . . .)

"Dr. Kent Davenport, Honolulu Medical Group orthopedist and one of the town's most confirmed bachelors, shocked friends by announcing that he's soon to be not — or knot; wedding bells to ring . . ." (Chapman's "Dis and Dot")

Two women whose husbands are Catholic and who conceived through the efforts of the Pacific In-Vitro Fertilization Institute at KWCMC praised the institute and its co-director, Philip McNamee. They agree that in-vitro fertilization is a miracle and not a sin as indicated by the Vatican . . .

Phil explains that the Institute serves only married couples and does none of the other things the Vatican objects to, such as cloning or experimenting with embryos . . . In the in-vitro process, the woman's ovaries are stimulated to produce many eggs, which are removed by a hypodermic needle and put in a petrie dish where they are fertilized by the husband's sperm . . . The fertilized eggs incubate for two days and become four-to eight-cell embryos that are placed into the woman's uterus . . .

Central to Vatican reasoning are two time-honored church principles that every human life must be respected from the moment of conception on, and that the only acceptable way to procreate a child is through sexual intercourse between married spouses . . .

The 9-year-old Medicaid Fraud Control Unit has been accused of violating legal rights, harassing, and in some cases ruining doctors' reputations and careers. The State House Judiciary chairman, Wayne Metcalf, has given the controversial unit a year to correct procedures or cease operating . . . "If those problems cannot be resolved by July 1, 1988, the unit will go out of existence."

Private-practice psychiatrists and psychologists are refusing to take Medicaid patients because they fear the devastation that has already been brought upon several of their colleagues.

Miscellany

An infant boy was born with deformed eye
(Continued on page 269)

Did you know?

Did you know that Saint Francis Medical Center is now a surgical leader?

The only one doing organ transplants, both kidney and bone marrow, and a leader in laser surgery.



Saint Francis Medical Center

Discover the Difference



TURN HEADS



The AMG Mercedes Benz: a machine of heroic capabilities . . . designed to reward the discriminating driver who claims the horizon as personal property.

We're proud to announce the exclusive line of AMG Body Styling Kits, wheels and accessories for Mercedes Benz. AMG devotes 100% of its engineering genius to the development of exclusive modifications and conversions for the remarkable Mercedes Benz automobile. At Magnum Motorsport, we can customize your Mercedes, better your BMW, or accessorize almost any car, including VW, Honda, Toyota, Datsun and Mazda.

Call for FREE brochure and more information.

777 Kapiolani Blvd.
537-3975

MAGNUM
MOTORSPORT
INTERNATIONAL MOTORING ACCESSORIES

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo) 329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**

(Continued from page 267)

lids . . . The OB man called his plastic surgeon colleague who suggested using the foreskin after circumcision . . . The procedure went well with good cosmetic results, but when the boy grew older, he couldn't stop winking at girls . . . (As told by Andrew Uramoto, retired police sergeant)

☆☆☆

What did the elephant say to the naked man?

How can you breathe through that little thing? (As told by Annie Chun, former Abbott rep.)

☆☆☆

"Do you know why the podiatrist never knows the joy of victory?"

"Because he only deals with the agony of the feet." (As told to Dennis Wachi by Claire Nakatsuka)

☆☆☆

Two guys are shooting heroin in an alley. A fellow passing by sees what's happening.

"Hey guys! That's not smart . . . You could get AIDS . . ."

One of the two replies, "We're not that stupid . . . We're both wearing condoms . . ." (As heard by Charlotte Beal, our managing editor)

Conference Notes . . .

The April issue of HMJ carried only part of our notes on Norman Kaplan's lecture: "Mild Hypertension" The rest are contained herein:

Re: Quality of Life: (As related by relatives) Loss of energy 81%; poor memory 33%; irritability 46%; depression 46%; diminished sexual function 65% . . .

When to start drug therapy: If diastolic pressures are elevated three times on two different occasions . . . If 100, start treatment; if 95 or less, consider drug therapy . . .

Non-drug therapy: (a) Wt. reduction if obese; (b) Sodium restriction — 2gm/d; (c) More fiber and less saturated fats; (d) Supplemental K, Mg, Ca not needed; (e) Confine alcohol intake to 2 oz/d; (f) Regular isotonic exercise; (g) Relaxation therapy . . .

Re: Jogging: "Joggers don't actually live longer . . . They just seem to . . ."

Re: Smoking: "Cessation of smoking does not lower BP . . . wt. goes up and BP in turn may rise . . ."

Re: Drug Therapy: (a) Response to Beta-blockers decreases with increasing age, (b) response to calcium channel-blockers increases with increasing age . . .

Present Choice of Drug Therapy for Mild Hypertension: (a) Diuretics 90%; (b) Beta-blockers 8%; (c) Others 2%.

Future Choice of Drug Therapy: 1—Younger population: (a) CEI (conversion enzyme inhibitors); (b) Alpha-blockers; (c) Beta-blockers; (d) Central agonist. 2—Older population: (a) Calcium channel-blockers; (b) Alpha-blockers; (c) Diuretics; (d) Central agonist.

Visiting Physicians

Eli Glatstein, chief of the National Cancer Institute's Radiation Oncology Branch for the last decade (author of 162 papers and chapters in textbooks), has strong feelings about cigarettes and tobacco products. Eli says "One of the real disgraces of American Society is that people grow tobacco and market these bits of cancer-causing crud — and sell them to Third World countries to spread the stuff . . ."

The American Cancer Society projects that lung cancer will be the No. 1 cancer killer in both men and women this year with 136,000 deaths and 150,000 new cases . . . Eli says "Only 13% of lung cancer patients are expected to live more than five years after diagnosis . . . Small-cell lung cancer is found in one-sixth of lung cancer patients and almost always in smokers . . ."

Physicians Speak Up . . .

Our good friend Kekuni Blaisdell, professor of medicine, says that the once hardy Hawaiian race now ranks poorly in health . . . "Today, some 250 years later, we descendants of those hardy early Polynesians suffer the worst health conditions in our homeland . . . We Kanakas now lead the island racial groups in heart disease, cancer, strokes, accidents, diabetes, suicide, high blood pressure, kidney failure, dental caries and teen-age pregnancy . . ."

A 1985 Hawaiian Health Needs Study Report attributes this condition to the continuing abuse and humiliation of native Hawaiians, and further loss of native culture, religion, language, lands, etc.

Entrepreneurs . . .

Two years ago, pediatricians Henry Yim and Wyman Tong of Windward Pediatrics Inc. relocated to Kaneohe's residential neighborhood into a one-story building exuding a relaxed country-like atmosphere wherein the patients can enjoy the outdoor waiting area with its view of the Koolau mountains . . .

The clinic also has an indoor waiting room with three separate sections so that well patients do not mix with the sick, and there is a separate entrance for contagious patients . . .

Kaiser Permanente will open its Kona clinic in the Hualalai Medical Center Bldg. in July . . .

The Garden Isle reported that "Yonemichi Miyashiro formed the Garden Island Medical Group in 1964 . . . The group, which now includes Paul Arrington, Robert Conrad, Lambert Lee Loy, James Tan, Mariano Torres, Eric Yee, and Hiram Young, began construction on a new clinic in Koloa to be completed by summer" . . .

Yone, with typical modesty, wrote a letter to the editor explaining that "Drs. Wade, Brennecke and Goodhue formed the original Wai-mea Clinic in June 1964 . . . They asked me to join them as a junior partner . . . The name was changed to the Garden Island Medical Group in 1986 . . . We, the present members of the Garden Island Medical Group, are the

"It was 2 a.m.; my car wouldn't start. CarKeepers had it going by 2:15."

Discover the Complete Maintenance Program . . .



"Nobody could fix my electrical problem — until CarKeepers."

Discover the Complete Maintenance Program . . .



"The best part of CarKeepers is what happens when I'm out of town."

Discover the Complete Maintenance Program . . .



"I don't have time to drop off my car for service — CarKeepers does. I never leave my office."

Discover the Complete Maintenance Program . . .



Let CarKeepers be the General Practitioner for your car. We do it all for you . . . and we make house calls.

Renewing your CD? Talk to E.F. Hutton about serious money investments.

If you are interested in learning more about the facts and principles of investments aimed at preserving existing capital, fill out the coupon attached and we'll have an Account Executive give you a call. Or, if you prefer, call now for immediate action
521-2961.

**2500 Pauahi Tower
1001 Bishop Street
Honolulu, HI 96813**

**When E.F. Hutton talks,
people listen.**

☐ I want more information! Please have an Account Executive call me.

☐ I'm interested. Please send me more information.

Name _____

Address _____

City _____ State _____ Zip _____

Business Phone _____ Home Phone _____

EFH Acc't # _____

EFHutton

E.F. Hutton & Company Inc.
2500 Pauahi Tower
1001 Bishop Street
Honolulu, HI 96813

Member SIPC

beneficiaries of their dedication and foresight . . ."

Conference Humor

Three surgeons were discussing patient characteristics and a relative case to be operated on . . . Surgeon A: Certainly, the German patients are the easiest . . . They are so organized and disciplined that all organs and parts are in place . . . Surgeon B: No, I think the Japanese patients are easier. They are equally organized and disciplined and they have microchips in their organs, which make them easier to locate . . . Surgeon C: You are all wrong . . . The attorneys are the easiest to operate on . . . They have no hearts, and no guts . . . Besides their mouths and anuses are interchangeable . . . (As told by S.Y. Tan, doctor-lawyer who heard the joke from fellow law students . . .)

Miscellany

(Heard by our favorite MSD rep., Claire Nakatsuka)

Three locals triple date and go to the fanciest restaurant in town . . . The Hawaiian guy says to his date, "Pass the sugar, Honey! . . ." The Portuguese fellow was duly impressed and even more impressed when the Chinese guy says, "Pass the honey, Sweetie!" After much deliberation, he says to his date, "Pass the pork, Piggy! . . ." (As told by Mark Chung)

☆☆☆

A scientist is studying the behavior of flies . . . He repeats, "Fly! Fly! Fly away!" The fly flies away . . . He removes two legs and the fly still flies . . . He jots down in his journal, "Fly flies away."

He next removes one wing and observes, "Fly flies crooked." He removes the other wing and repeats, "Fly! Fly! Fly away!"

But the fly doesn't fly . . . He jots down in his journal, "Fly deaf." (As told by Tad Iwanuma)

Personalities

Vic Hay-Roe's fondest ambition was to be a commercial artist or Disney cartoonist . . . but he ended up a plastic surgeon . . . Ten years ago Vic bought a kit for Christmas tree ornaments depicting Snow White and the Seven Dwarfs and it has been Christmas all year 'round since . . . Vic and wife Lynn have been making Christmas tree ornaments ever since — over 600 characters from children's stories and Disney denizens . . .

Physicians Retired

E. Morris Hayes, born of missionary parents in Shanghai, still spends three days a week at the Kula Clinic as a respite from managing stubborn Kikuya grass in his yard — thus carrying on his mission of healing instilled in him as a child . . .



WE'RE
FIGHTING FOR
YOUR LIFE

**American
Heart
Association**



*“I can alert
40 salespeople with
one phone call.”*

That's efficient. That's TeleMessenger, from Hawaiian Tel. Call 545-1800 and learn what else TeleMessenger can do for you.

*“Keeping
our service personnel
on schedule
would be impossible
without TeleMessenger.”*

That's productive. That's TeleMessenger, from Hawaiian Tel. Call 545-1800 and learn what else TeleMessenger can do for you.

*“When I have an
important message for
our mainland offices,
it doesn't matter if the
Boston branch
has closed for the night.”*

That's beating the time zone problem. That's TeleMessenger, from Hawaiian Tel. Call 545-1800 and learn what else TeleMessenger can do for you.

*“I used TeleMessenger
to send the
information that closed
the sale—
while I was away on
vacation.”*

That's good business. That's TeleMessenger, from Hawaiian Tel. Call 545-1800 and learn what else TeleMessenger can do for you.

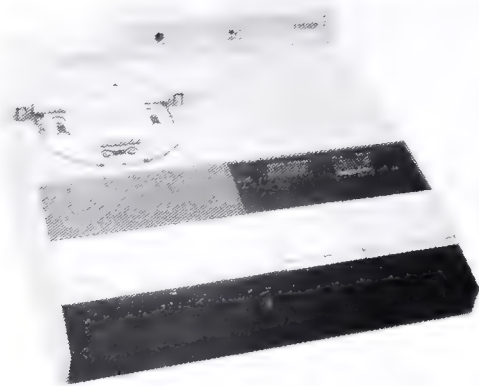
HAWAIIAN TEL GTE
SPECIALIZED COMMUNICATIONS DIVISION

Beyond the call

The

MESSANGER

*Management's ticket
to productivity.*



- The voice processor that enables simultaneous dictating and transcription
- Separates work on 4 selected tapes or "file boxes"
- Call in dictation, delegation, thoughts and ideas from any touch tone phone (i.e. home, airport, hotel, etc.)
- Built-in intercom system
- 600% faster than writing
- Acts as a telephone answering service, message recorder



—FREE—
POCKET RECORDER*
With every "MESSANGER" SYSTEM
*or 2 Insight Classics

Trust Lanier.

Call us today for a free evaluation of your needs.

536-7751



HARRIS

LANIER

HAWAII



**OH,
WHAT
RELIEF . . .**

Sudden staff illness, planned vacation, excess workload can put strain on your support staff. We can provide relief.

Our staff is specifically trained and suited to adapt quickly and perform in the most demanding situations.

- Available on call 24 hours a day.
- No bonding, insurance, payroll, taxes, benefits to pay.
- Specialists in medical staffing needs.

526-3761



Kahu Malama Nurses, Inc.
680 Ala Moana Blvd., Suite 412
Honolulu, Hawaii 96813
(808) 526-3761



**Over the
Editor's
Desk**

STEPHEN R.P.K. BRADY, MD

STUDY REVEALS WIDE DISPARITY BETWEEN PREFERENCE AND PRACTICE IN TREATMENT OF PROSTATE CANCER—Surgical removal of the testicles is still being performed in the wide majority of cases (an estimated 70%-80%) of advanced prostate cancer even though only 41% of men say they would choose surgery if offered a choice, according to a survey released today. A nearly equal percentage of men — 40% — say they would choose a self-injected drug therapy that is more expensive and would have to be taken for the rest of their lives.

"Physicians continue to perform orchiectomies (surgical removal of the testicles) because they believe this is still the best treatment for advanced prostate cancer," according to E. James Seidmon, MD, assistant professor of urology, Temple University School of Medicine.

"This is no longer true," Seidmon said. "It is clear that drug therapy available today is just as effective in treating advanced prostate cancer and also goes a long way toward preserving the patient's self-image."

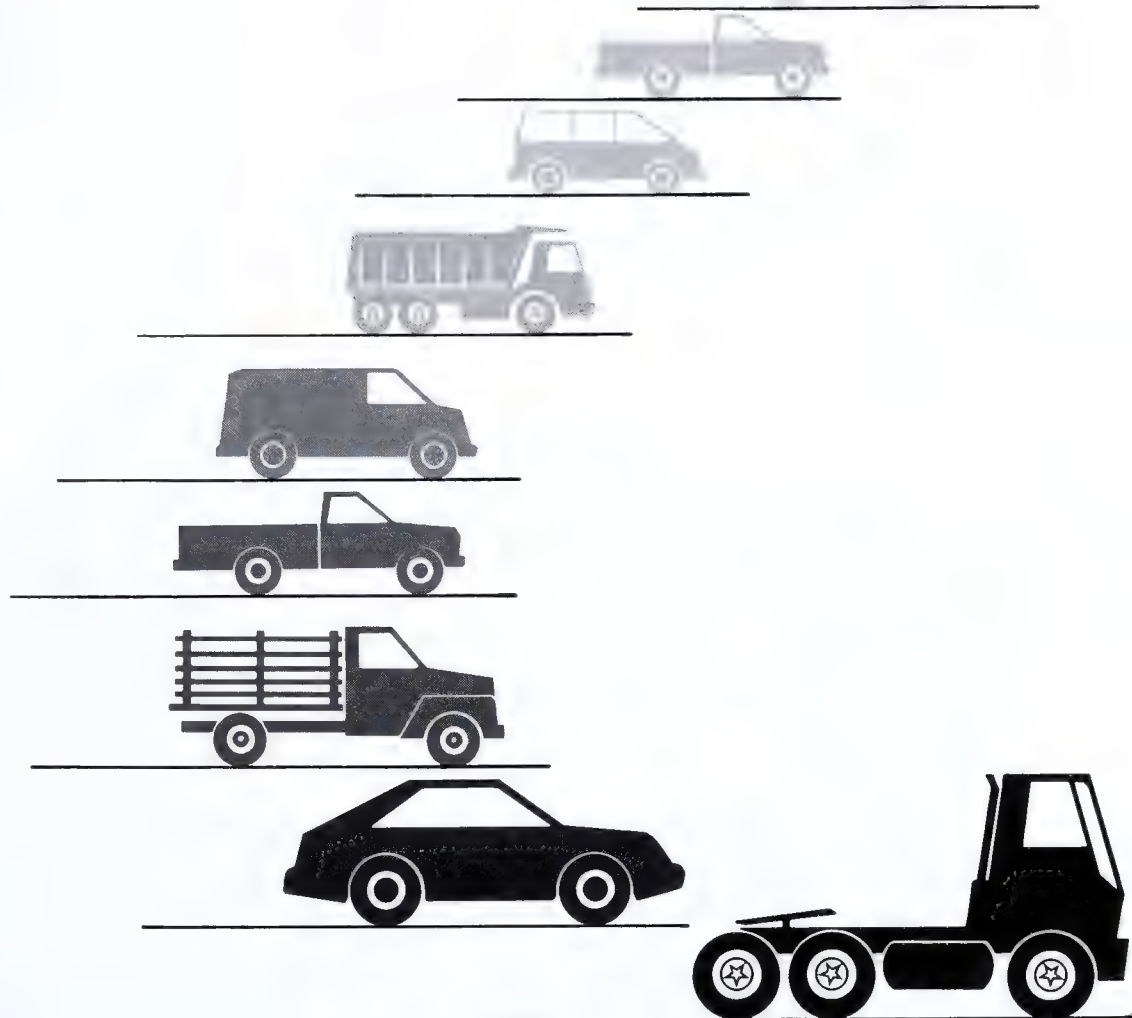
Among American men, the incidence of prostate cancer is expected to nearly equal that of lung cancer in 1987, with about 96,000 new cases expected to be diagnosed, according to the National Cancer Institute. Some 27,000 patients with prostate cancer are expected to die in 1987, ranking as the third most common cause of all cancer deaths among men.

In treating advanced prostate cancer, Seidmon urged physicians to make an effort to bring the number of orchiectomies performed in better balance with drug therapy. "Generally, 20% to 40% of those men having orchiectomies today could be treated with one of the drug therapies available."

In view of physicians' apparent prefer-

(Continued on page 274)

We lease all kinds.



Name a vehicle.

Any vehicle from a four-door sedan to a dump truck, and chances are that GECC Hawaii Leasing can put you behind the wheel.

Or behind the four-wheel.

Or even behind the 18-wheeler.

We're Hawaii's largest vehicle leasing company, and a part of the \$26 billion General Electric Credit Corporation. We offer competitive rates and flexible terms on individual vehicles or fleets, with the ability to provide fast, timely service.

And we even offer a program of sale/lease back where GECC buys your existing vehicle fleet and leases the fleet back to you. The new tax law changes alter some of the benefits of leasing. So give us a call today.

And we'll give you a vehicle.

Because no one wheels and deals better with you or your company than GECC.

700 Bishop Street, 9th Floor
Honolulu, HI 96813 Ph. 527-8333

GECC HAWAII LEASING

a division of:



**GECC
Financial
CORPORATION**

*First and Second Mortgage Financing for Commercial and Residential Real Estate • Credit Lines for Individuals and Businesses
Equipment and Vehicle Leasing • Inventory and Receivable Financing • Thrift Investment Programs*

Member FDIC



If you do business in Hawaii . . .

and want an inside look at the business and professional community — including, but not limited to, civil court cases, building permits, real estate transactions, tax liens, new corporations and partnerships; plus, a host of other informative features

. . . we have news for you



PACIFIC
BUSINESS
NEWS

For information call 521-0021.

CLASSIFIED NOTICES

BUSINESS OPPORTUNITIES

FOR SALE-established family practice island of Kauai. Fully equipped & staffed. Contact Dr. De Alday 1-338-1664 or write P.O. Box 849, Waimea, Hawaii 96796.

EMPLOYMENT OPPORTUNITIES

NEUROLOGIST

Board certified, part-time or full-time neurologist for EEG & EP imagining diagnostic clinic. Opportunity for participation. Call 545-3800.

ISLAND FEVER?

Respected Internist desires to switch practices for a short time. Good salary. Good living conditions. Glen Deutsch MD, 410 Division St., Buffalo, MN 55313. (612) 682-3325

FOR SALE

50% OFF PREVIOUSLY OWNED MEDICAL, LABORATORY, x-ray, ultrasound equipment. Buy. Sell. Broker. Repair. APPRAISALS BY CERTIFIED SURGICAL CONSULTANTS. Medical Equipment Resale, Inc. 24026 Haggerty Rd., Farmington Hills, MI 48018; 1-800-247-5826, (313) 477-6880.

OFFICES

Has parking been a problem for you and your clients? Call us today! We have the office space for you with ample free parking. Bobbie Martinsen (R) 521-0321 HAWAII MANAGEMENT CORP.

To place a Classified Notice, call Leilani at 521-0021.
4 line min., approx. 5 words per line.
Payment must accompany order.

OTED

(Continued from page 272)

ence to perform surgery for prostate cancer, the survey findings demonstrate the need for patients to take greater responsibility for choosing between equally effective forms of treatment.

"Otherwise," noted Seidmon, "the physician will most likely guide the patient to what he believes is the most appropriate form of treatment. If this involves surgical removal of the testicles, the psychological consequences can be devastating to the patient, especially if he finds out later equally effective drug treatment was available."

The report also found that prostate cancer is just as much a health concern as high blood pressure and stroke, although the highest group at risk — men over the age of 60 — are the least worried about developing prostate cancer when compared to younger men.

INFORMATION ON BRANHAMELLA CATARRHALIS—The newly recognized pathogenicity of *B. catarrhalis* is generally unknown to American physicians who treat annually millions of children's ear infections and elderly patients with bronchitis and pneumonia. The incidence of *B. catarrhalis* is increasing dramatically.

For example, in middle-ear infections in Dallas last year, its incidence jumped from 7% to 24%, a finding representative of increases in other cities where *B. catarrhalis* is being tracked.

To add to the concern, the bacterium is resistant 75% of the time because of its production of beta-lactamase, an enzyme that inactivates commonly prescribed penicillins and cephalosporins.

For these reasons, it is exciting to learn that the U.S. Food and Drug Administration has granted Beecham Laboratories the first indication to market an antibiotic for lower respiratory infections caused by *B. catarrhalis*. Augmentin^R (amoxicillin/clavulanate potassium) is a combination antibiotic where the inhibiting agent (clavulanate potassium) "fools" the beta-lactamase into binding with it and in doing so stabilized the "labile" antibiotic, leaving it free to kill the invading bacteria.

EXPOSURE TO INTENSE LIGHT DURING MORNING SHIFTS BIOLOGICAL CLOCK AND LIFTS SEASONAL DEPRESSION—A few hours of intense light exposure in the morning is effective in relieving depression in patients who ordinarily become melancholic as days grow shorter. Ex-

posure to bright light in the evening, however, does not produce a similar therapeutic effect, according to researchers at the Sleep and Mood Disorders Laboratory of the Oregon Health Sciences University.

The scientists hypothesize that the biological clocks, or circadian rhythms, in people with winter depression are delayed — specific hormonal secretions occur later in the day than is normal. By exposing these individuals to intense light first thing in the morning, their circadian rhythms may be advanced to an earlier time, thereby correcting their internal clocks.

To test their theory, the researchers exposed a group of seven control subjects and eight seasonally depressed patients to three different treatment regimens involving one week of bright light exposure either in the mornings, the evenings or both. All subjects were evaluated by a psychiatrist using a standard depression rating scale. In addition, blood samples were taken to measure levels of the hormone melatonin in all test subjects at baseline and after each week of treatment. (Many investigators believe that melatonin secretion from the pineal gland in the brain is closely linked to circadian rhythm.) Psychiatric ratings

performed before light treatment revealed that the depressed patients were in fact moderately depressed. Furthermore, melatonin secretion in the depressed group was initially delayed about two hours compared with the control group.

A week of morning exposure to bright light significantly improved mood in the depressed group and brought their melatonin secretion times closer to those of the control group. (Morning light exposure did not cause sizeable changes in the biological clocks of the controls.) Evening or mixed morning and evening light exposure failed to elicit a similar therapeutic or hormonal response.

MIEC

(Continued from page 263)

pains, but it also is the "reserve" that cushions against the consequences of actual malpractice. Insurance, therefore, is morally reprehensible on both counts.

The answer must be lying elsewhere than in purchasable insurance at reasonable cost, which is what the HMA is striving for at present. Actual "mal" practice comprises a very small part of mal-occurrence, which is often unintentional, unpredictable, unlikely and may-

be the smaller of two risks to which the patient acquiesces after so-called "informed consent." Malpractice and mal-occurrence should be kept as far apart as possible, and treated differently.

Meanwhile, however, we must deal with the realities of the current premium "crisis." MIEC has made application to Hawaii's insurance commissioner for approval of its new, proposed rate change. Should the commissioner deny the application or order a reduction in the future, MIEC may have to pull out of Hawaii as a carrier, leaving most of Hawaii's physicians "unprotected."

The HMA Council, in response, voted to send a letter to the commissioner, expressing its deep concern over such an eventuality.

The Council also voted to spend money to hire an independent actuary to review MIEC's figures. This was perfectly acceptable to the MIEC representatives; it will open its books for that purpose. The Council demonstrated its wisdom by voting in such a way in order to protect the membership of the HMA.

J.I. Frederick Reppun, MD
Editor

"I just put more time in my day."

"If you're like me, time is your most precious commodity. And you probably spend 110% of it trying to be in three places at once."

"With a Honolulu Cellular Telephone, I can take the features and convenience of an office phone wherever I go. For a lot less than you might think."

"Now I can organize all my activities while I'm on the road. Talk with the press. Coordinate meetings. Even put together a bed race. And have more time to go the extra mile."

CAROLE KAI, Founder,
The Carole Kai International Bed Race

Honolulu Cellular Telephone Company

Hawaii's choice for quality cellular service
1161 Kapiolani Boulevard, Honolulu, Hawaii 96814 545-4765

ERICSSON

PREMATURES

(Continued from page 237)

Although the long term outcome of these children is unknown, the majority were performing as well as their non-premature peers, and the majority of parents were satisfied with their child's performance level, even when that level required special remediation.

Obviously, a history of prematurity places a child at increased risk of some sort of special education need in later life. However, this is a starting point and not a final diagnosis. The extent of prematurity, presence of congenital anomalies and the entire medical course are all important in determining outcome.

Ultimately many children who were premature at birth may become indistinguishable from their full-term peers. Parental perceptions are important (a "tough little survivor" will probably be treated very differently from a "vulnerable child") but many parents are able to individualize and accept their children, regardless of whether problems are present.

Much additional work needs to be done on both physical and psychosocial outcomes of prematurity, and on the effectiveness of various interventions in the nursery and beyond. However, this limited study seems to suggest that there is a satisfactory return in the quality of life for many of the children saved by the innovations of the last 20 years in neonatology.

Mary S. Sheridan, PhD, ACSW, is a social worker at the Pulmonary Service, Kapiolani Medical Center for Women and Children. She is a former faculty member at the University of Illinois and the University of Hawaii, and a former school social worker.

ACKNOWLEDGEMENTS

Grateful appreciation is expressed to Robert Anderson, MD, and to Wynetta Carl Matsuda, RN, PNPC, for allowing access to the patients of the Neonatal Intensive Care Follow-up Program at Kapiolani Medical Center, and for their assistance.

NOTES & REFERENCES

1. Hunt JV, Tooley W and Harvin D: "Learning Disabilities in Children With Birth Weights <1500 Grams." *Seminars in Perinatology* 6(4):280 October 1982.
2. See, for example, Noble-Jamieson C, Lukeman D, et al, "Low Birth Weight Children at School Age: Neurological, Psychological, and Pulmonary Function." *Seminars in Perinatology* 6(4):266 October 1982.
3. Caputo D, Goldstein K, and Taub H: "The Development of Prematurely Born Children Through Middle Childhood," Chapter 11 of T. Field, ed., *Infants Born at Risk* New York: S.P. Medical and Scientific Books, 1979.
4. Werner E, Bierman K, and French F: *The Children of Kauai*. Honolulu: University of Hawaii Press, pp. 64-67, 1971.
5. Anderson R: "Follow-Up of the High-risk Infant: Methods of Evaluation and Management." Chapter 19 in V. Kelley, ed., *Practice of Pediatrics*, rev. ed., Philadelphia, Harper & Row, 1986.
6. Personal communication from the State of Hawaii Department of Education, reflecting 1984 enrollments.
7. The original theory of the "vulnerable child" was presented by Green M and Solnit A in "Reactions to the Threatened Loss of a Child: A Vulnerable Child Syndrome," *Pediatrics* 34:58, July, 1964. A useful discussion of the interaction between prematurity (and other experiences of infancy) and vulnerability can be found in McCormick M, Shapiro S, and Starfield B: "Factors Associated with Maternal Opinion of Infant Development-Clues to the Vulnerable Child?" *Pediatrics* 69(5):537, May 1982. Several studies have questioned the existence of a "vulnerable child syndrome." Among these is Scheiner A, Sexton M, Rockwood J, et al, "The Vulnerable Child Syndrome: Fact and Theory," *Developmental and Behavioral Pediatrics* 6(5):298, October 1985.

PHYSICIANS

**Your Army Reserve Personnel Counselor
would like to talk to you about the following
opportunities in the US Army Medical Department:**

**PART-TIME INCOME
RETIREMENT POTENTIAL
POST EXCHANGE PRIVILEGES
INSURANCE DISCOUNTS**

**CONTINUING MEDICAL EDUCATION
ATTENDANCE AT AMA CONFERENCES
TRAINING AT U.S. ARMY HOSPITALS
ALL PAID FOR BY THE US ARMY RESERVE**

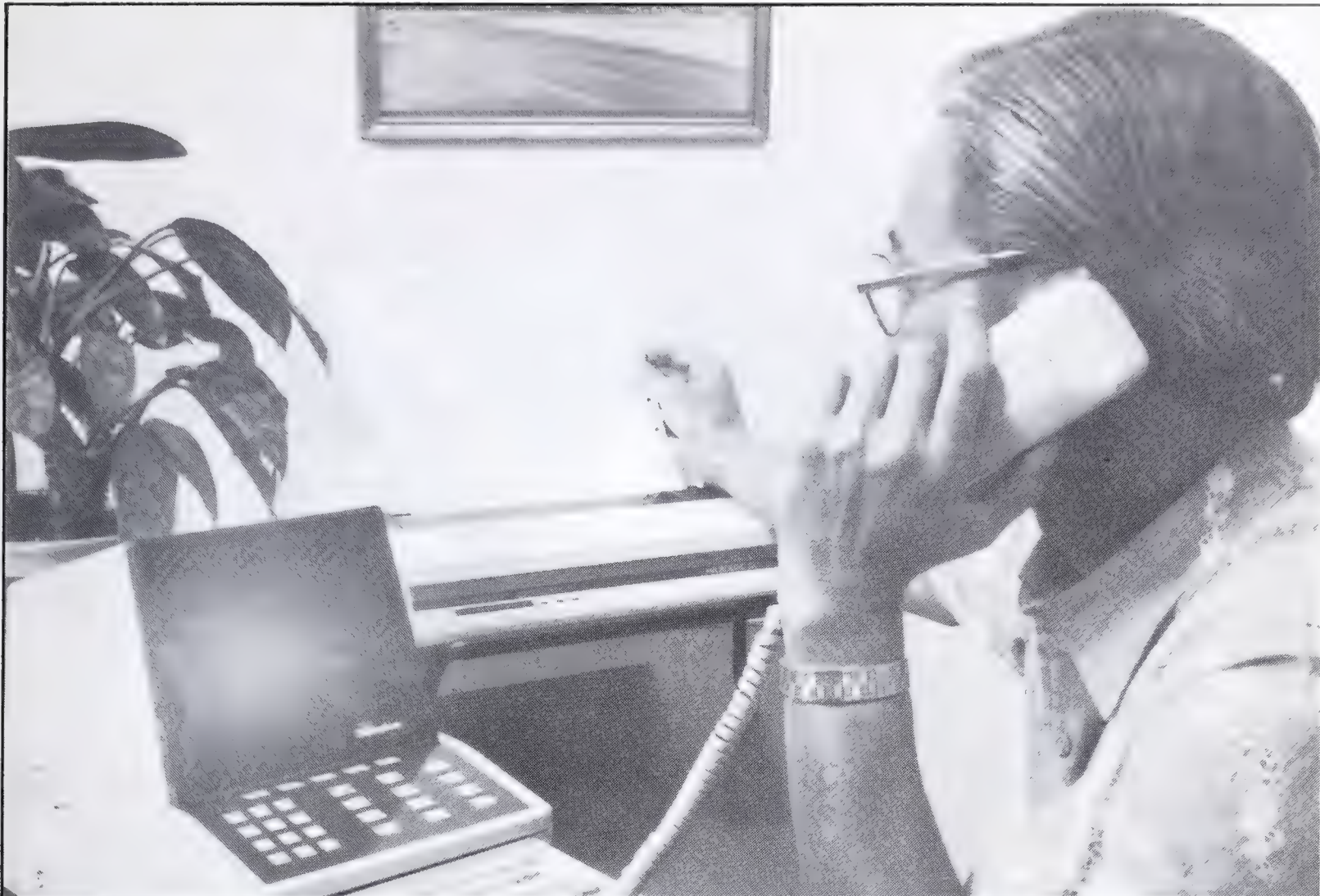


Call the San Francisco Field Office

(415) 751-1616 Collect

USAR AMEDD Procurement, ATTN: SGPE-PDR-SF, Bldg 1801, Presidio of San Francisco, CA 94129

**Many groups TALK about building a better America-
The Army Reserve WORKS at it.**



As Hawaii's own independent clinical laboratory,

Diagnostic Laboratory Services serves you and your patients with advanced computerized technologies for maximum reliability and efficiency. **DLS** provides a broad scope of high quality lab services at a reasonable cost. **DLS** offers physicians and hospitals the latest information systems to enhance their practices and benefit their patients.

Creative physicians today use innovative supporting services to the advantage of their patients and practices. With our skilled staff, state-of-the-art instrumentation, and centralized computer system, we can assist you in providing your patients better medical care.

Networking

DLS offers physicians and hospitals the opportunity to utilize LABNET, a new dimension in laboratory services: an on line computerized information system allowing you immediate access, 24 hours a day, to comprehensive clinical information while simultaneously protecting its security and confidentiality.

Centralized Computer System

DLS is computerized from the moment patient information and specimens are registered to the final delivery of results to your office by courier or LABNET. For the extra protection of your patients, our computer highlights all significant abnormal test results, alerting our Client Service Department to call your office.

Additional Services

- Automated Hematology
- Multi Channel Chemistry Analyzer
- Broad Range of In-House Esoteric Testing
- Disease Oriented Profiles
- Flexible Billing
- HMSA Assignment Accepted

Put us to the test.

 **Diagnostic
Laboratory
Services INC.**

523-7061

Your dream vacation could be as close as the nearest First Hawaiian Bank. Because when you ask for MasterCard Travelers Cheques between June 1 and September 11, your teller will give you a contest entry blank.

The Grand Prize is a 17-day Australian Adventure or a 7-night Alaskan Cruise. And you'll be taking along \$1,500 in MasterCard Travelers Cheques, too.

Plus, there are over 890 other great prizes being awarded.

MasterCard Travelers Cheques are only available at First Hawaiian. And they're as good as gold in over 100 countries around the world. So if you're going on a trip, be sure to carry MasterCard Travelers Cheques.



Ask for
MasterCard®
Travelers Cheques,
and you could be
off to Australia
or Alaska.
For free.

Enter the MasterCard Travelers Cheques Sweepstakes at any First Hawaiian branch.

See entry blank for official rules. No purchase necessary to enter or win. Must be 18 or older to enter.



FIRST HAWAIIAN BANK

We say yes to you.

Member FDIC



AUGUST 1987
VOL. 46, NO. 8

Hawaii Medical Journal

CONTENTS

FROM THE PRESIDENT	284
Walter W.Y. Chang, MD	
FROM THE DIRECTOR OF HEALTH	284
John C. Lewin, MD	
EDITORIAL:	288
AIDS	
J.I. Frederick Reppun, MD	
CONTINUING MEDICAL EDUCATION	288
THE IMPAIRED PHYSICIAN	289
Harvard Medical School Health Letter	
PREVENTION AND CONTROL OF AIDS	293
Interim Report from AMA Board of Trustees	
ANTI-RH (D) IMMUNOGLOBULIN USE FOR IMMUNE THROMBOCYTOPENIC PURPURA	293
Robert T.S. Jim, MD	
INSTRUCTIONS TO HMJ AUTHORS	302
SYMPHALANGISM AND ITS INTRODUCTION INTO HAWAII: A PEDIGREE	305
Stephen A. Gaal, MD	
James R. Doyle, MD	
Ivar J. Larsen, MD	
CLINICAL PATHOLOGIST'S EASY CHAIR	307
Francis Fukunaga, MD	
HEALTH CARE QUALITY IMPROVEMENT ACT OF 1986: A PERSONAL OPINION	310
John H. Pearson, MD	
BOOK REVIEWS	312
Milton M. Howell, MD	
Elizabeth M. Adams, MD	
NEWS & NOTES	313
Henry Yokoyama, MD	
OVER THE EDITOR'S DESK	314
Stephen R.P.K. Brady, MD	

Hawaii medical journal
UCSF LIBRARY
Received on: 09-01-87



131st Annual Scientific Meeting
October 9 - 11, 1987
Kauai Hilton and Beach Villas
Lihue, Hawaii
Plan now to attend!

BUY vs. LEASE? LET THE BUYER BEWARE.



Beware the hidden costs when investing in new capital equipment.

Buying ties up your cash and your hands. Subjects your company to inflation and risk. And leaves you open to paying too much for your new equipment.

Commercial Leasing avoids the penalties of buying.

Leasing conserves capital and improves your cash flow. In a lease, you need little or no down payment. A lease provides 100% financing, which can include delivery, installation, taxes and progress payments. You keep your cash for working capital, investments, expansion or other vital uses. Nor, must you raise new capital

to obtain needed equipment.

Leasing is a hedge against inflation and risk. You pay for today's equipment with tomorrow's cheaper dollars. Also leasing protects you from the risk of obsolescence. You're never stuck with inefficient, outdated equipment. Or paying for it!

Leasing brings down the cost of equipment. Bancorp Leasing

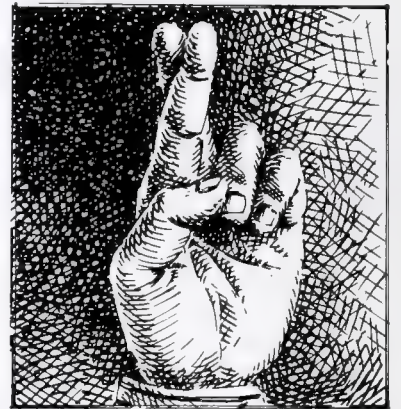
rental payments are often significantly less than standard loan

payments. And, now, with 1986 tax

reform eliminating the investment tax credit, changing depreciation rules, and the new Alternative Minimum Tax, leasing may lower the tax bite. Further, you may be able to expense the entire amount of your payments for tax purposes, reducing your tax liability more.

You need the use of equipment now, not ownership in the future. Learn the actual dollar savings of leasing vs. buying from the experts in the largest equipment leasing company

in Hawaii. Allied with Hawaii's largest bank, Bank of Hawaii. (So if a Bank of Hawaii loan is better or cheaper, we'll tell you that, too.) You have nothing to lose and everything to gain. Call 537-8812. No obligation. Avoid the pitfalls of investing in capital equipment. You can with Bancorp Leasing.



Bancorp Leasing of Hawaii

A subsidiary of Bancorp Hawaii

(USPS 237-640)

Published Monthly for the

HAWAII MEDICAL ASSOCIATION

(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814

Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD

Founding Editor: HARRY L. ARNOLD JR., MD

News Editor: HENRY N. YOKOYAMA, MD

Assistant Editor and Book Review Editor:

DOUGLAS G. MASSEY, MD

Contributing Editors: STEPHEN R.P.K. BRADY, MD,

FRANCIS H. FUKUNAGA, MD,

Managing Editor: CHARLOTTE BEAL

Editorial Assistants: BECKY KENDRO,

JUDI KINGREY

Copy Editor: GWENDOLYN CHANG HULLEMAN

Graphic Artist: J. CHARLES DAVIS

Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,

THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,

JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD

(Commissioner)

HENRY N. YOKOYAMA, MD

(Chairman)

STEPHEN R.P.K. BRADY, MD,

NATHANIEL P.H. CHING, MD,

FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,

JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,

JAMES P. MCGUIRE, MD,

DAMKERNG PATHOMVANICH, MD,

ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,

J.I. FREDERICK REPPUN, MD,

TERRY C.Y. WONG, MD,

SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD

President-Elect: JAMES LUMENG, MD

Past President: RUSSELL T. STODD, MD

Secretary: JOHN H.C. KIM, MD

Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD

Honolulu: JOHN T. McDONNELL, MD

Kauai: THOMAS GROLLMAN, MD

Maui: HELEN S. PERCY, MD

West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD

CALVIN C.M. KAM, MD

Alternate Delegates to AMA

WALTER W.Y. CHANG, MD

RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.

Post Office Box 833

Honolulu, Hawaii 96808

Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.

16 Bruce Park Avenue

Greenwich, Connecticut 06830

Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.



"The hottest
new entry
in the field of
four-wheel drives!"
AUTOMOTIVE EXECUTIVE
March 1987

FOR A CHANGE OF PACE... ...SUZUKI SAMURAI

For a change of pace . . . the SUZUKI SAMURAI!! It's the first "mini" four-wheel drive that gives you everything you ever wanted in a vehicle. The toughness of a truck, with the comforts of a car and the promise of something new and exciting. Even more exciting is the SAMURAI'S lofty EPA gas mileage rating of 27 MPG city and 29 MPG highway*. The SAMURAI's 5-speed manual transmission is no wimp either, as it packs plenty of sheer fun and excitement into your life! So, join the fun and experience what the SUZUKI SAMURAI 4x4 is all about!

"If you're not having fun yet,
you haven't discovered the
SAMURAI."

POPULAR MECHANICS
February 1987

FUEL ECONOMY

City* **27** mpg

Highway* 29 mpg

For fun, excitement and
a change of pace ex-
perience the SAMURAI!!

SUZUKI... It's 4U2!!

*1986 EPA Estimates. Use these estimates for comparison. Actual mileage may vary depending upon trip length, speed, and weather. Actual highway mileage will probably be less

VISIT YOUR NEAREST DEALER TODAY!!

• **KAILUA TOYOTA**
Kailua Ph. 261-3321

• **WAIPAHU TOYOTA**
Waipahu Ph. 677-3161

• **MOTOR IMPORTS**
650 Kapiolani Ph. 526-2688

• **KAUAI TOYOTA**
Lihue Ph. 245-6978

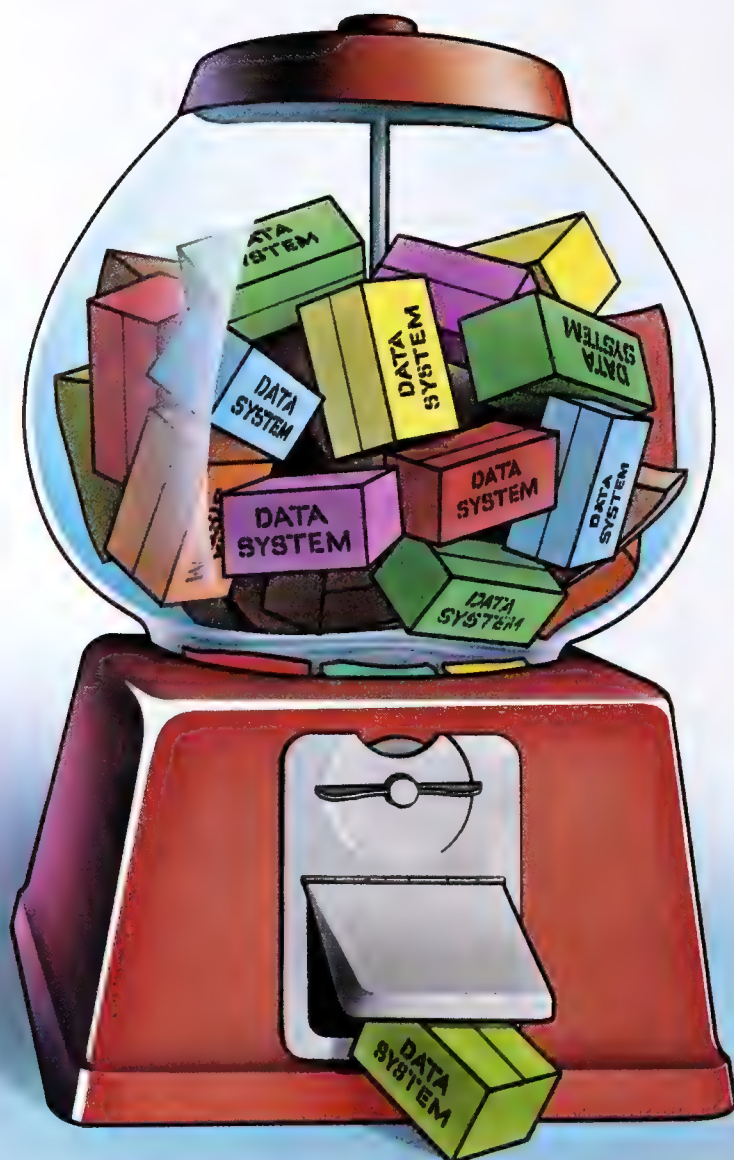
• **KAIMUKI TOYOTA**
Kaimuki Ph. 735-1737

• **WAHIAWA TOYOTA**
Wahiawa Ph. 622-4195

• **WINDWARD TOYOTA**
Kaneohe Ph. 235-0068

• **TOYOTA CITY**
Moanalua Gardens
Ph. 834-1402

If Only It Were This Easy.



If only there were one universal data system that met everyone's needs. Unfortunately, there isn't.

Every company has a different set of data requirements.

At Hawaiian Tel, we design data networks to meet those requirements. No matter how complex they may be. You see, we deal in data solutions. Not just data equipment. We're consultants before we're salespeople.

If existing equipment can be utilized to solve your problem, it will be. Our loyalties are with you. Not with product vendors.

And if we have more than a single solution to your data problem, you'll get the most fitting one. Not the most expensive one.

A final thought to chew on: data networking is another form of telecommunication. And you know who the expert at that is. Call us at 546-7842.

HAWAIIAN TEL GTB

Beyond the call



Most business deals boil down to financial muscle.

You either have it or you don't.

The advantage comes from a tough business sense, as well as a strong banker with clout.

At First Interstate, you've got both. A financial expert whose analytical skills and sound judgement can create the winning edge in any business deal, a strategic partner who works with you from the start to develop solutions and opportunities to keep your profit picture rosy.

Adding strength to muscle, you also have the support of the nation's largest

multi-state banking system with over \$52 billion in assets.

With these extensive resources, First Interstate offers local businesses a wide range of services all under one roof. From innovative financing techniques to advanced cash management products. From exceptional customer service to specialized industry expertise.

Let's talk about what a strong financial network can do for your business future. Call First Interstate at 525-6820 today.



First Interstate Bank



FROM THE PRESIDENT

Dangers of Adolescence

Truly, adolescence can be a period of great peril.

Accidents were the leading cause of all deaths in both sexes from ages 1 to 34 in 1984 (CA, Journal of the American Cancer Society, Vol. 37, No. 1, Jan/Feb 1987). The total was over 45,000 for 1984 and was only 10,000 less than the entire number killed in the 10-year Vietnam war.

It is predicted that there will be over 5,000 teenage suicides this year. In 1984, there were over 9,000 male and over 2,000 female suicides in the age group from 15 to 34 years of age.

Illicit drug usage, especially with the more potent and cheaper derivatives like "crack" continue to be a problem for the adolescent, along with alcohol.

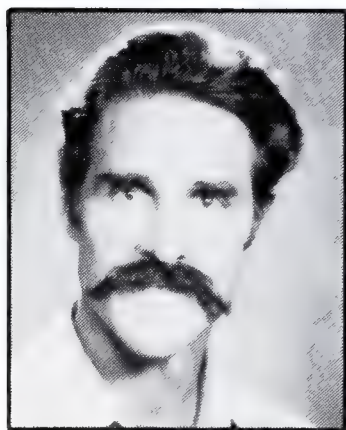
Unintended teenage pregnancies also place a strain on society as well as on the teenager's mother and family.

The potential impact of AIDS in the adolescent age group is as yet unknown, especially among those who are sexually active and are not using contraceptives.

Physicians need to take a more active role in counseling, educating and treating the adolescent. Even one loss is a loss too many.

The premature loss of so many members of the next generation is a great tragedy, more particularly so as the "Baby Boomers" of yesteryear are now the yuppies of today, leaving yet a smaller base of the younger generations to come.

Walter W.Y. Chang, MD
President
Hawaii Medical Association



FROM THE DIRECTOR OF HEALTH

Environmentally Related Illnesses and Injury

Pesticide residues in milk and water, lead (Pb) accumulation in soils and concerns relating to the irradiation of papaya and other foods have been recent issues in Hawaii. In addition, there are growing concerns relating to air pollution from the proposed municipal waste incinerator in Honolulu, spills of oil and hazardous materials and many other potential environmental health hazards. These concerns can only be expected to grow in years to come as laboratory detection methods improve, urban centers expand into areas previously used by agriculture and new chemicals are introduced into our environment.

In 1985, a Department of Health survey of randomly selected households throughout the State demonstrated the importance

of these environmental issues. This survey found "chemical pollution" to be the issue of most concern to Hawaii's residents, surpassing "violent crime," "drug and/or alcohol abuse," "cost of medical and health care" and "communicable diseases (including AIDS)." If this survey were conducted today, AIDS would probably rank higher than in 1985.

While this survey points toward a pressing need to obtain data and develop expertise effectively to address concerns regarding environmental health hazards, the actual extent of illness and injury in Hawaii due to exposure to pesticides, lead and other toxic chemicals in the environment remains unknown. Consequently, these concerns are very difficult to address.

INTRODUCING . . .

The Royal Hawaiian Buick Dealers

A new dealer group with an old-fashioned
way of doing business: with pride.

For nearly 85 years, the name of Buick has been associated
with tradition, substance and pride. Those same values are held by the
Royal Hawaiian Buick Dealers. We feel the old-fashioned way of
doing business is still the best way. We think you'll agree.



1987 BUICK SOMERSET



1987 BUICK RÉGAL

Schuman Carriage Co., Ltd.
Honolulu

Hawaiian Motors, Inc.
Hilo and Kona

Kuhio Motors
Kauai

Haleakala Motors
Maui

Childhood lead poisoning, for example, has been recognized as one of the most serious environmental health problems in the United States. However, this condition is seldom recognized or reported in Hawaii. A recent review of hospital records indicated only three cases of lead poisoning on Oahu since 1970.

Recent research has shown learning disabilities and behavioral disorders in children with blood lead levels previously thought to be acceptable. Indeed, subtle biochemical and enzymatic changes have been shown to occur when levels are as low as we can measure them. Fortunately, Hawaii has no major industrial sources of lead. Lead has been practically eliminated from paints and it is currently being phased out of gasoline. However, due to the multitude of sources to which children may be exposed, e.g., soils, air, foods and water, lead poses a much greater problem than we previously recognized.

The Department of Health, in collaboration with other agencies, is developing a surveillance system for pesticide poisoning and other environmentally related human illness and injury. An agreement to report pesticide-related illness and injury to the Department of Health was recently made between the Department of Health, the Board of Agriculture, the Department of Labor and Industrial Relations, the Hawaii Poison Center, and the University of Hawaii School of Tropical Agriculture and Human Resources Cooperative Extension Service. Although this will enhance cooperation and coordination among these agencies, many cases of pesticide poisoning recognized by physicians still may not come to our attention.

This year, the Legislature passed House Bill 378, which authorizes the Department of Health to require physicians, osteopaths and laboratory directors to report to the Department all cases of pesticide poisoning, lead poisoning and certain other conditions determined by the health director to present a threat

to public health.

The manner in which health conditions are to be reported will be specified by the director in the Department's administrative rules. Announcements on reporting requirements and procedures will be made via the Epidemiology branch's "Green Sheet" in a few months.

These measures will enhance the Department's ability to maintain surveillance of the extent and severity of pesticide poisoning, lead poisoning and other conditions that may present a threat to public health. Through surveillance, the current knowledge of how health might be affected by environmental contaminants is enhanced, existing regulatory measures can be evaluated and more effective controls can be developed. Experience derived from existing communicable disease-reporting requirements indicates that most physicians will cooperate with the new requirements.

The Department of Health acknowledges the need for training programs in the recognition and management of pesticide poisoning, lead poisoning and other environmentally related conditions. Therefore, to complement these measures, the Department of Health will be working with the Hawaii Medical Association in providing educational opportunities and resources to assist physicians and other health care providers in the recognition and management of pesticide poisoning and other environmentally related illnesses and injuries.

It is hoped that these measures will enable the Department of Health and the State of Hawaii not only to develop improved environmental protection programs but also to improve physician awareness and understanding of environmental health hazards.

John C. Lewin, MD
Director of Health

"I just put more time in my day."

"If you're like me, time is your most precious commodity. And you probably spend 110% of it trying to be in three places at once."

"With a Honolulu Cellular Telephone, I can take the features and convenience of an office phone wherever I go. For a lot less than you might think."

"Now I can organize all my activities while I'm on the road. Talk with the press. Coordinate meetings. Even put together a bed race. And have more time to go the extra mile."

CAROLE KAI, Founder,
The Carole Kai International Bed Race

**Honolulu Cellular
Telephone Company**

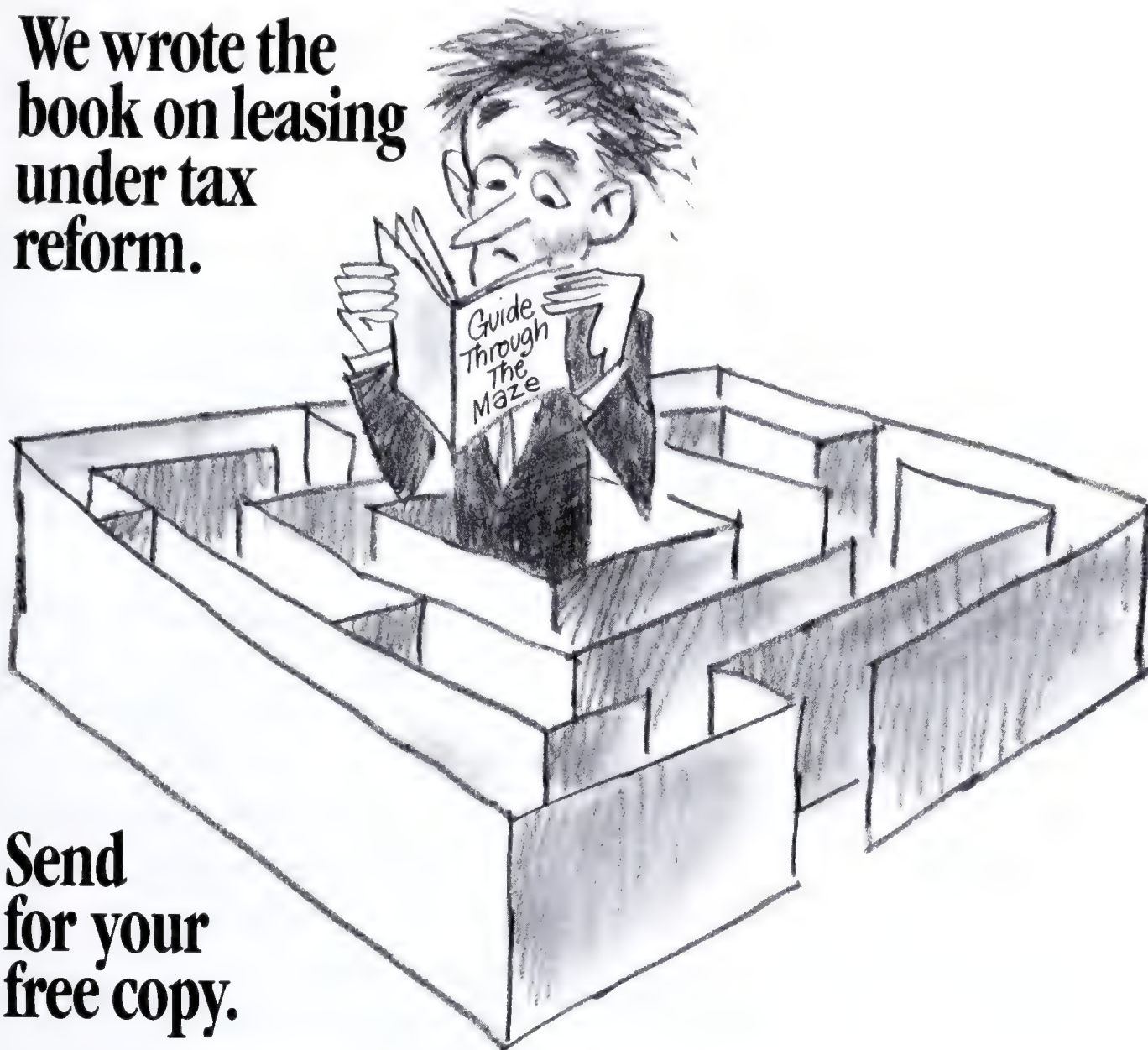


Hawaii's choice for quality cellular service

1161 Kapiolani Boulevard, Honolulu, Hawaii 96814 545-4765

ERICSSON

**We wrote the
book on leasing
under tax
reform.**



**Send
for your
free copy.**

Does leasing make sense after tax reform?

For some companies, it not only makes sense, it could become imperative.

But leasing can be an arduous journey through a maze full of pitfalls for the inexperienced.

The booklet, "Leasing and Tax Reform: a Guide through the Maze," can help. It's a refreshing 32 pages of plain talk about this complex subject.

It's by the (very experienced) leader in leasing—in Hawaii and across the United States—the \$26 billion General Electric Credit Corporation.

And it's free.

Use the attached card to send for your personal copy today, while supplies last.

GECC HAWAII LEASING

a division of:



700 Bishop Street, 9th floor Phone: 527-8333



AIDS: Report From AMA

In this issue of the JOURNAL, to which Crossroads Press Inc. has attracted a larger number of advertisers than usual, we have been granted a larger number of "editorial" pages to fill.

This gives us an opportunity to publish for local professional distribution the full text of Report YY, adopted by the AMA at its June '87 House of Delegates meeting.

This policy statement on AIDS is the official stand of organized medicine. Physicians and other health care providers, as well as the general public, should use it for guidance as the impending worldwide epidemic affects us all.

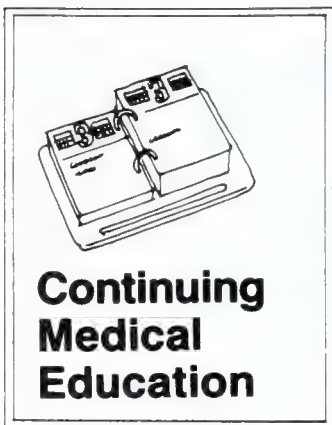
The officers of HMA recommend that this report be studied carefully.

J.I. Frederick Reppun, MD
Editor

In Memoriam

The Hawaii Medical Association and the JOURNAL are saddened by the demise of Charles S. Judd Jr. MD on July 23, 1987, after a brief illness. Charlie was a strong shoulder to the wheels of organized medicine, the Hawaii Medical Journal and the Hawaii Medical Library, as well as to other organizations and community projects. We shall miss his presence, his support and his strong character. We offer condolences to his bereaved family.

J.I. Frederick Reppun, MD
Editor



CALENDAR OF ACCREDITED EVENTS—CATEGORY 1

Accredited programs of CME allow one unit of AMA credit for each hour of instruction excluding all "breaks." Some programs also are accredited for AAFP-prescribed credit.

LOCAL ACCREDITED PROGRAMS ONGOING

For a complete list of ongoing programs, please refer to the March 1987 edition of the HAWAII MEDICAL JOURNAL. Further information is available through the individual institutions or through HMA's CME Department.

SPECIAL EVENTS

All special events should be confirmed with the CME program sponsors, as cancellations are not necessarily reported to the HAWAII MEDICAL JOURNAL.

Sept. 13-20, 1987 Diving and Marine Medicine, Robert K. Overlock, MD, Hyperbaric Treatment Center, 42 Ahui St., Honolulu 96813, 523-9155. Location: Maui.

Sept. 26, 1987 Cholesterol & Smoking: Coronary Risks, co-sponsored with Merrell Dow, Paul Silva, 261-3872. Location: Kahala Hilton.

Oct. 19-23, 1987 New Approaches to the Evaluation of Neoplastic Lymphoproliferative Disorders co-sponsored with the University of Southern California, School of Medicine. Contact: John W. Parker, MD, Professor of Pathology, University of Southern California, School of Medicine, 2025 Zonal Ave., Los Angeles, Calif. 90033, 213-224-7121. Location: Mauna Kea, Big Island.

Nov. 10, 1987 How To Recognize and Combat Nutrition Misinformation, Hawaii Dietetic Association co-sponsored by Hawaii Medical Association, Margie C. Sue, 912 Kaahue St., Honolulu 96825, 395-3504. Location: Pacific Beach Hotel.

Dec. 20-24, 1987 Immunology, Rheumatology and Allergy, Symposium Maui Inc. co-sponsored by Hawaii Medical Association, Joe Harrison, MD, P.O. Box 10185, Lahaina, Hawaii 96762, 808-661-8032 or 879-8182. Location: Royal Lahaina Resort, Maui.

The Impaired Physician*

Some doctors abuse drugs or alcohol, or have other problems that impair their professional performance. We asked Dr. Bernard Levy, Chairman of the Committee on Impaired Physicians of the Massachusetts Medical Society, to discuss physician impairment. Dr. Levy is an Assistant Clinical Professor of Psychiatry at Harvard Medical School.

What is meant by "impaired" physician?

For practical purposes, an impaired physician is someone whose ability to work is compromised by one of the following problems: alcohol or drug abuse (about 80% of cases seen), senility (perhaps 10%), mental illness, or aberrant behaviors that appear to be part of a stress reaction (uncommon). There are also certain meanings that impairment does *not* have in this context.

Impairment does not mean malpractice. A doctor may be impaired before he or she commits any obvious act of malpractice — and most malpractice seems to originate with doctors who don't have any of the problems I've listed. Malpractice is fundamentally negligence — not knowing enough to do the right thing or not exercising appropriate precautions. The danger here is that, by confusing impairment with malpractice, colleagues or other observers will think that nothing can, or should, be done about a doctor's impairment until a patient is injured. (The cases that make headlines are just these: A substance-abusing doctor is tolerated on a hospital staff until something dreadful happens.)

When a physician appears to be impaired, some important, but admittedly difficult distinctions must be made. The focus of concern is professional conduct — not the person's private life. For example, a physician who periodically goes on weekend binges but is always sober and appropriate during working hours has a drinking problem. But it is not so clear that he or she is professionally impaired. At the other extreme, someone who lies to, cheats, steals from, or sexually exploits patients may have serious emotional problems. But the real problem is a breach of ethics, and the general assumption must be that the person's character is incompatible with the practice of medicine.

To a large degree, the decision to call certain types of behavior "impaired" reflects the belief that the problem is circumscribed and can be fully solved or controlled without terminating the person's career. Alcohol abuse, for example, is far from rare, and many otherwise effective and valuable people, in all professions, are susceptible to it. Rehabilitation is possible in the vast majority of cases and, for both humane and practical reasons, is preferable to punishment. However,

if efforts at rehabilitation are not rapidly and fully effective, there may be no alternative but to revoke the person's license.

How many physicians are impaired?

It's hard to collect reliable data to answer this question, and the most conservative statement is "no one knows." A plausible estimate is that 3% of physicians, at some time in their careers, are impaired as a result of drug or alcohol abuse. Other estimates place the figure at 5% or higher. Careless interpretation can make the situation look worse than it is. If you counted anyone who self-prescribed a sleeping pill in the past year as a drug abuser, you would come up with much higher numbers — implying an "epidemic" of abuse that just doesn't exist.

In general, doctors don't appear to be much different from the general population with respect to drug and alcohol abuse. Drugs are most used when they are most available, however. So doctors who work in hospital or clinic settings (where a supply of drugs is kept on the premises) are more likely to use drugs than others. Anesthesiologists, who constantly handle narcotics, among other substances, are at high risk. A fairly straightforward method for reducing this hazard is to introduce strict monitoring of drugs. (A few years ago, evidence emerged that the drugs "missing" from one major eastern hospital had a street value in the tens of millions of dollars.)

Some doctors are at especially high risk because of their personality characteristics or personal history. Those with a background of abusing drugs, especially in their teens, may continue or resume that pattern in adulthood. It also seems that doctors in high-stress settings — perhaps especially those who feel that they must carry the ball on their own — are pretty vulnerable. They may come to see stimulants and sedatives as a way of holding themselves together — and not be able to conceive of the alternative of getting human help either with their work or with their problems. People who feel that the approval of others is conditional on their performance are often unable to turn to family or personal relationships for support or relief from stress. Drugs or alcohol may then offer themselves as an attractive alternative. Finally, of course, the medical habit of treating problems with pills is sometimes carried over into one's personal life.

What happens to impaired physicians?

Most of them are highly treatable. They can usually continue to work, or return to work fairly quickly. The real difficulty is identifying them at an early phase and getting them into a program. Once they have been identified, the personal stakes are so high, and methods of control so effective, that relapse is uncommon.

In all 50 states the medical societies have developed some kind of program for monitoring and treating impaired physicians. I'll describe the process in Massachusetts, the example I know best.

When a report comes in that a doctor is impaired, two

* Excerpted from the March 1987 issue of THE HARVARD MEDICAL SCHOOL HEALTH LETTER © 1987 President and Fellows of Harvard College. Individual subscriptions (\$18 per year) and bulk subscriptions (reduced rates on 50 or more copies per month) are available. Contact THE HARVARD MEDICAL SCHOOL HEALTH LETTER, 79 Garden St., Cambridge, Mass. 02138 (617) 495-5234.

members of the Committee on Impaired Physicians are assigned as a team to evaluate the situation and, if need be, confront the physician. In fairly short order, as a rule, the impaired physician agrees to a plan. The cost of not cooperating is simply too high.

The first order of business is to establish whether the doctor's patients are safe. This may entail a period in which he or she does not practice and receives intensive treatment.

In any event, there will be a follow-up plan. Virtually always, this means setting up a contract through which the doctor's behavior is monitored for a matter of years. The team of two doctors follows the impaired physician on a personal basis, takes responsibility for monitoring compliance, and, as appropriate, confers with the physician's superior or else a responsible colleague. The full committee of 25 meets regularly to review problem cases and decide whether the program is working. If it is not, referral to the state's licensing board may be recommended. At meetings of our Committee on Impaired Physicians, cases are not identified by name but by number. This helps to preserve the dignity of the person under discussion and also to maintain impartiality of the committee.

In the case of drug addiction, there is a very high rate of successful treatment and control — at least 85% is the usual experience, and with people seen by our committee it has been close to 100%. The plan may include therapy, participation in a group such as Narcotics Anonymous, and regular urine drug monitoring. One of the team members assumes responsibility for observing collection of the specimen and conveying it to the laboratory. Urine testing is a very powerful tool in this context — many addicted professionals find that once they are in such a program, the temptation to resume drug use is readily resisted. But routine urine screening of all physicians would be likely to create more problems than it solves.

Alcoholism is more prevalent than drug addiction and is harder to treat. There tends to be a lot of denial of the problem. "A few drinks" are socially acceptable — often even encouraged when they should not be. The first step — confrontation — can help the person begin to regain control. Within Alcoholics Anonymous there are physician and professional groups, which alcoholic doctors are encouraged to attend. Alcohol can be monitored by smell, behavior, breath analysis, and blood detection. Alcoholic doctors are one group for which the drug disulfiram (Antabuse®) can be very effective. This drug makes people sick if they take a drink, but it only works when the person is highly motivated to take it regularly.

Rather uncommonly, compulsive behaviors may emerge as part of a physician's reaction to stress. These have ranged in our experience from inappropriate friendliness during a consultation (described as "creepy" by several patients), to bizarre gestures during examination, or in one case, bizarre behavior outside a practice setting. In all cases, there was "sexual" content to the behavior, but patients were not violated. The behavior was isolated, not part of an overall pattern, and in each case appeared to be part of a reaction to unusual stress in the person's private life. After the physicians were confronted, therapy was effective in ending the behavior. Where there was a

potential for inappropriate behavior during an examination, the presence of a female chaperone was required (good practice in any case).

Other kinds of mental illness less commonly require intervention. The main form that affects practicing physicians is depression, and a severely depressed doctor most often withdraws from practice until recovery is adequate.

Senility — the loss of mental, emotional, and physical capacity to practice as a result of age — must be handled in a different way. Here, the essential task is to get the physician to recognize the need to retire. A team may have to visit several times and confront the aging practitioner to bring this about.

How do doctors get into the system?

They have to be reported by someone. Occasionally, a doctor is self-referred, but questionable behavior is more likely to be reported by a patient, colleague, or relative.

It is remarkable how often the reporting is done in a compassionate spirit. I can recall one episode in which four women patients of the same physician, having observed the same sort of inappropriate behavior during consultations, reported the problem to our committee. Their dominant worry was that he might respond to his situation by committing suicide. Confrontation helped him to alter his behavior; he then agreed to get therapy and was able to continue practicing. Another time, a police chief called to report that an elderly doctor in his town was prescribing narcotics to drug addicts. The chief was certain that misplaced kindness was the reason, not greed, and this proved to be the case; the doctor thought the addicts were really in pain. Here, our role was to help the doctor retire from practice.

In most states, people who report a suspicion of impairment are protected from lawsuits — provided the report is made in good faith without malicious intent. Patients who have reported a probable impairment almost inevitably have to change doctors, though, simply because the situation would be too tense otherwise.

Our real problem is with getting physicians to report the impairment of their colleagues. Taking this first step seems to be most difficult — despite the fact that many doctors are ready and willing to commit their time and effort to helping with the remedy. Many states have laws requiring physicians to report themselves if they have an impairment. Writing such laws so that they are consistent and enforceable proves to be difficult. There is always a paradox: You want people to be open and to seek help, but by requiring disclosure and attaching legal sanctions, you may drive them underground. There's a fine line between bureaucratic overkill and excessive latitude in these matters. The most stringent laws are not necessarily the most successful.

In the long run, I think the most important steps that can be taken to reduce impairment to a minimum require changes in the way we train and sustain doctors. The competitive outlook cultivated during medical education makes physicians vulnerable to a sense of isolation and desperation. As a result, they are often less able to seek help from, or offer it to, their colleagues than they should be.

**APPLY BY
SEPTEMBER 1, 1987
AND SAVE 20%.**

AT LAST.

**A cure for
the high cost
of medical
malpractice
coverage.**



Our 350 physician-members agree that PIP has decreased their annual medical malpractice costs up to 75 percent.

Let us help you with your medical malpractice concerns. Contact us today for more information. It's good to have a choice . . . It's great to make the right one.

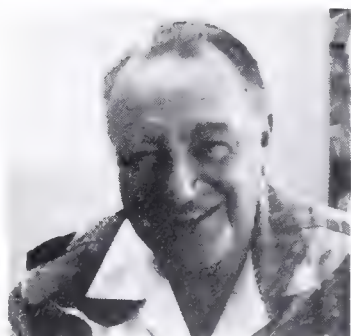
The Hawaii Association of Physicians for Indemnification (HAPI) offers a doctor owned, tax-deductible malpractice protection plan to qualified physicians and surgeons practicing in the state of Hawaii.

HAPI's Physicians' Indemnity Plan (PIP) can provide you with \$1,000,000 of medical malpractice coverage.

Norman J. Slaustas
Administrator, HAPI and PIP
735 Bishop Street, Suite 311
Honolulu, Hawaii 96813
(808) 538-1908

PIP
Physicians' Indemnity Plan
HAPI
Hawaii Association of
Physicians for Indemnification





Frank E. Ceccarelli, M.D.,
Urology



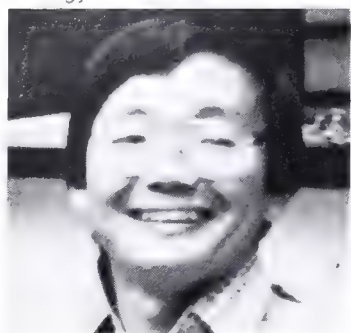
Susan H. Chapman, M.D.,
Obstetrics/Gynecology



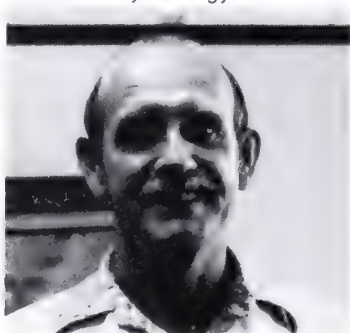
Bernard Fong, M.D.,
Cardiology



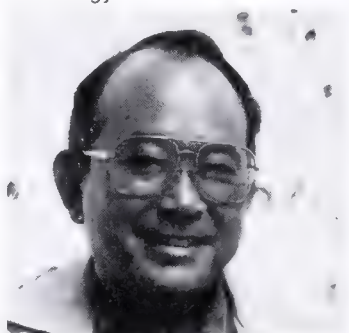
Alvin Furuike, M.D.,
Pulmonology



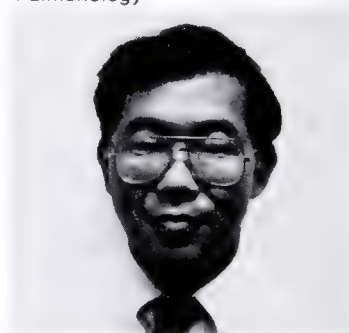
Thomas Y. Ito, M.D.,
Urology



C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



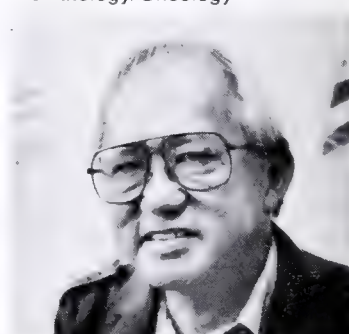
James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



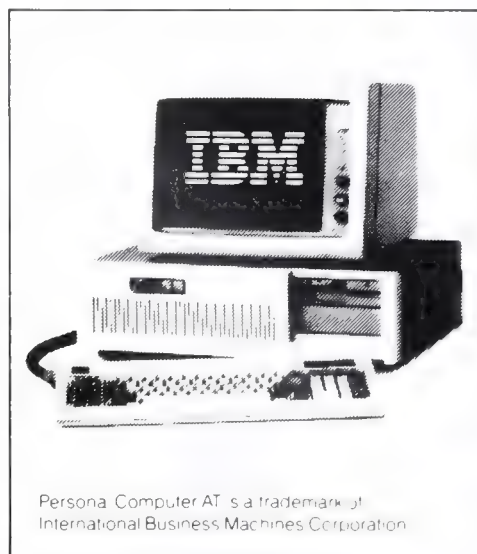
Paul I. Sunahara, M.D.,
Dermatology



Henry L. Yim, M.D.,
Pediatrics

What do these doctors have in common?

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims



Personal Computer AT is a trademark of
International Business Machines Corporation

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary.

Prevention and Control of AIDS — An Interim Report From the AMA Board of Trustees

Responding sensitively, intelligently, and effectively to the growing AIDS crisis is one of the crucial public health problems facing the nation. Prevention and control of the disease must be an essential part of that response because there is, at present, no known cure for AIDS patients.

Introduction

Recommendations in this report have as their foundation an overriding concern for a judicious balance between the well-being of HIV-positive patients and the protection of the public health. These recommendations are based upon the best information and data available at present.

The AMA will continuously monitor and analyze developments in AIDS and update AMA policy and recommendations as dictated by advances in knowledge.

Education continues to be the major weapon against spread of HIV infection. Physicians should assume the leadership role in educating themselves, their patients and the public. Individuals in society also must assume responsibility for being well-informed and for actions that affect their own health and the health of others.

In developing this report, the Board emphasizes the need for concerted and cooperative efforts by all members of society in the fight against AIDS. The recommendations outlined below are designed to help in successfully confronting this challenge to society's well-being.

Background

The Current Climate. It is estimated that 5 million to 10 million people are infected with HIV virus worldwide. AIDS has been reported in more than 100 countries. In the United States HIV-infected individuals may number 1.5 million, approximately 35,000 of whom have been reported to suffer from AIDS and more than 20,000 of whom are dead.

The U.S. Public Health Service has projected that by 1991 there may be 323,000 reported patients with AIDS and as many as 200,000 of them may be dead by that time. In addition, conversion rates of seropositive people to AIDS status now appear to be higher than early preliminary estimates.

Originally under 20% were thought to convert. It now appears that, without treatment advances, a much higher percentage will develop the disease.

Seventeen percent of the AIDS cases have been intravenous drug abusers; 66% have been homosexual/bisexual men; 8% have been homosexual male IV drug users; female, heterosexual male, and pediatric victims infected by the transfusion of blood or blood products, sexual contact, or prenatally in the case of infants, account for the bulk of the balance.

Polls indicate that AIDS has become the highest-priority health concern of the American public, ahead of heart disease

and cancer. It has already caused changes in a variety of public attitudes. Sexual abstinence, monogamous relationships, and the use of condoms are being widely promoted in the media by public officials and many private organizations. IV drug abusers are being counseled to use clean needles and to avoid sharing needles.

Education on the sexual transmission of the AIDS virus is being extended to school children. The nation is more sensitive to the rights of those afflicted with the disease to be free from discrimination, regardless of the manner by which they became infected.

Historical Control Measures for Infectious Diseases. A primary mode of transmission of AIDS is through sexual contact, and the control efforts for sexually transmitted diseases (STD) that have been instituted in the past are sources of analogies for prevention and control of AIDS.

National programs to control STDs were established during the beginning of World War I. For the following 50 years the focus was almost exclusively on the control of syphilis and its complications. During World War II rapid treatment centers for syphilis and gonorrhea were established. Public health officials instituted limited contact-tracing, had the authority to close sex bars and clubs, to order tests for prostitutes, and, most importantly, had effective therapy to offer.

Widespread availability of penicillin led to the dissolution of the rapid treatment centers and of the clinical speciality, syphilology. Every state in the Union at one time required all persons seeking marriage licenses to be tested for syphilis. During the 1950s and 1960s federal assistance programs continued to support contact-tracing, serological screening, and patient education.

In the late 1960s public health officials were concerned about the rapidly escalating cases of gonorrhea, and projects were instituted to increase case-finding and contact-tracing. In 1972 financial assistance for STD control by the federal government was dramatically increased and by 1982 gonorrhea accounted for nearly three-fourths of the federal STD dollar.

During the 1970s gonorrhea control efforts evolved through overlapping phases that included objectives to lower disease incidence and the occurrence of drug-resistant bacteria, focused screening on high-risk patients, intensified follow-up of treatment failures, and used patient counseling as a means of increasing compliance with therapy and improving contact-tracing.

The latter was deemed especially important since the large numbers of gonorrhea cases precluded the intensive follow-up of each infected case that had been characteristic of the syphilis era.

In 1982 the World Health Organization/Pan American Health Organization (WHO/PAHO) identified the following

key objectives for intervention to reduce STDs:

- 1—To minimize disease exposure by reducing sexual intercourse with persons who have a high probability of infection.
- 2—To prevent infection by increasing the use of condoms or other prophylactic barriers.
- 3—To detect and cure disease by implementing screening programs, providing effective diagnostic and treatment facilities, and promoting health-seeking behaviors.
- 4—To limit complications of infections by providing early treatment to symptomatic and asymptomatic infected individuals.
- 5—To limit disease transmission within the community through the above efforts.

These objectives were used as a framework for the current U.S. program regarding STDs, which consists of the following components:

- 1—Health education and promotion.
- 2—Disease detection through testing and other means.
- 3—Appropriate treatment.
- 4—Contact tracing and patient counseling.
- 5—Clinical services.
- 6—Training.
- 7—Research.

The Challenge of AIDS Control. It might seem reasonable to extend the experience in preventing the spread of other STD infections to AIDS. The objectives established by WHO/PAHO and the components of the current national STD program are certainly applicable to AIDS. However, AIDS presents a much different social problem than other STD infections.

Since there is no cure for AIDS and no protection beyond avoiding or making safer intimate contact with infected individuals, those infected with the virus must be sexually isolated from uninfected persons. A condom barrier offers some but not complete protection. Avoidance of sexual contact and use of shared needles are the only sure protections.

Further, the stigma that accompanies a diagnosis of AIDS, based on fear and society's attitude toward IV drug abusers and homosexuals, presents a factor beyond the control of the infected individual or medicine. An HIV-seropositive individual who might live five years or much longer with no overt health problems, once identified in a community, may be subject to many and varied discriminations — by family and loved ones, by neighbors and friends, by employers and fellow employees, and by other providers of services.

As with prevention and control of all contagious diseases, prevention and control of AIDS involves two, sometimes competing, concerns. First, the person who is afflicted with the disease needs compassionate treatment, and both those who have the disease and those who have been infected with the virus should not be subjected to irrational discrimination based on fear, prejudice or stereotype.

Second, and of critical importance, the uninfected must be protected; those individuals who are not infected with the AIDS virus must have every opportunity to avoid transmission of the disease to them.

The Need for a National Policy on Aids

Given the growing dimensions of the crisis and given limited national resources, it is imperative that a national policy be developed jointly by the public and private sectors. Such a policy must seek, in a cost-effective way, to achieve fundamental national goals: prevention, treatment, and cure — and adequate research in all three areas.

A coherent national approach to this modern killer is needed: a comprehensive blueprint for a national response, not piecemeal solutions. Knowledge of the disease is now more than six years old and the growing magnitude of the problem has been apparent for nearly that long.

Such a national policy must have certain characteristics:

- The policy must be comprehensive, proceeding simultaneously on the fronts of prevention, treatment, and research.
- The policy must be coordinated between public and private sectors and between the different levels of government. A national policy does not necessarily mean a federal policy: There are important roles at all levels of the health care systems and at all levels of government. Nor does it necessarily mean uniformity: On certain issues different approaches should be tried to determine efficacy.
- The policy must be carefully balanced. For example, concern for the person with the disease must be balanced with concern for those who do not have the disease but who may become infected. Similarly, careful consideration must be given to directing scarce resources to increased prevention, even as increasingly large resources are necessarily devoted to research and treatment.
- The policy must be based on scientific information and medical judgments. Although policy choices must inevitably be made, they should be formed on the best available information and on the extensive public health experience in dealing both with AIDS and with other contagious diseases.
- The policy should be nonpartisan. Although it may be tempting to play on fears and prejudices, public figures and officials both inside and outside the health community should avoid exploiting the crisis for partisan political advantage.
- The policy should be capable of continuous review and modification as more and better information becomes available.

RECOMMENDATION 1: A commission, modeled after the commission that made recommendations on the problems of Social Security financing in the early 1980s, should be constituted with representatives from the executive branch of the federal government, the Congress, state and local government, and the private sector and directed to develop a consensus position for consideration by the Congress, the executive, state and local governments and private associations and institutions.

The presidential commission announced, but not yet appointed, by the administration could be broadened to implement this recommendation. A high-level body with representatives from the different branches and levels of government, but operating to the side of the more formal political processes, may have the best chance of forging the necessary national consensus, which can then become the basis for concerted and coordinated action by both the public and private sectors.

The Special Role of Physicians and Other Health Care Counselors

Because there is no cure for AIDS, effective preventive techniques are vital. This involves both those who are infected and those who are not. Those who are infected must be identified so that they will not unknowingly transmit the disease to others. Many who are not infected will need to change their behavior substantially to minimize their risk of infection by the AIDS virus.

The key to changed behavior is public education coupled with counseling, which must be given by physicians and other health care counselors.

Public Awareness. The public is well aware of AIDS in a general sense. The attention of the media has been intensively focused on the disease. Translating general awareness into modifications of behavior is the challenge.

The groups that are most at risk for AIDS, e.g., IV drug abusers, homosexuals, bisexuals, and prostitutes, have reason to know they are at risk. Their contacts, however, may not know they are at risk and hence spouses, unborn babies, and premarital and extramarital sexual partners may become infected.

Education and counseling aimed at the high-risk groups must be the first priority. The education should urge immediate counseling with a physician or other health care counselor about the risk of AIDS, the uses of antibody testing and preventive measures.

Also, it must be recognized that persons in these groups may not respond to education and counseling and, when they do not, more aggressive programs — such as expanded methadone maintenance programs or penalties for knowingly exposing others — must be considered.

Education aimed at the more general population is difficult for at least two reasons. First, reaching all Americans with an effective message can be expensive and not all people respond in the same way or to the same method of learning. Messages must therefore be tailored to the target audience in question.

Second, prevention messages must necessarily deal with controversial subject matter. Widespread use of the electronic media — especially television — appears to be the most effective way to reach the general public. Accordingly, public service advertising on the electronic media must be greatly increased and these announcements must be shown at times and in places where they will be viewed by those who need the message most.

The AMA will continue its efforts to place its own public service ads on national television. AMA's Tony Danza public service advertisement (PSA) directed at teenagers about abstinence and condoms, and other PSAs that the networks have agreed to use, are significant first steps. But, more must be done and it must be nationally coordinated.

RECOMMENDATION 2: The communications industry must develop voluntary guidelines for public service advertising regarding AIDS in consultation with the health care community and government officials. The AMA intends to be a catalyst in this effort to immediately bring the communications and health care communities together.

Counseling and Educating Counselors. Perhaps the greatest need at the present time is effective counseling of both low-risk and high-risk populations by physicians or other health care counselors. A massive education effort for physicians and other counselors is necessary as a first step.

Complete and accurate information on the disease, the modes of transmission, the appropriate application of antibody testing, and effective ways to change behavior must be understood by counselors if it is to be properly communicated to patients. In conjunction with face-to-face counseling, printed materials — like the surgeon general's recent 36-page report on AIDS — should be widely disseminated.

Even more challenging than preparing physicians and others for generic counseling on AIDS is preparing these counselors to assist those who test positive and are infected with the virus. It is at that time that a change of behavior on the part of the person infected is most critical, and it is then that the most sophisticated counseling is required due to the emotional impact of the test results.

There is no higher prevention priority than ensuring that the

community of individuals who provide health care counseling be given adequate tools to be effective. And the AMA, as the largest organization of physicians in the world, must take a leading role in this undertaking.

RECOMMENDATION 3: A conference should be immediately held between the AMA, other physician organizations and public health officials at all levels of government to determine:

- 1—The types of education and training that are necessary for effective counseling.
- 2—The people in the health care community who should receive this education and training.
- 3—The current resources available for such education and training.
- 4—Recommendations for providing additional resources, including consideration of the respective roles of medical associations and government at all levels.
- 5—Recommendations on how to update information continually as new scientific data are developed.
- 6—Recommendations as to alternative measures to prevent the spread of AIDS where education and counseling are not likely to be effective, particularly among IV drug users, through such programs as expanded methadone maintenance.

The AMA will promptly and widely report on the conference findings and assist in the implementation of the conference recommendations.

Voluntary and Mandatory Testing. Knowledge that a person is infected with the AIDS virus can be the crucial predicate to changing behavior. Thus, testing for an antibody to the AIDS virus, when used in conjunction with appropriate counseling (and when offered in the context of appropriate anti-discrimination and confidentiality protections discussed below), serves the important public health purpose of providing impetus for behavior changes that minimize the risk of transmitting the AIDS virus.

Clearly, the need for HIV-antibody testing has expanded beyond its original purpose, the screening of blood donors. Guidelines for the appropriate use of HIV-antibody testing must center on the following justifications:

- 1—To identify infected persons and to offer treatment where possible and to protect uninfected third parties.
- 2—To offer education and counseling that would modify high risk behavior.
- 3—To solicit patient cooperation for locating and referring sex partners.
- 4—To obtain broadened epidemiological statistics on the prevalence of HIV infection in the population.

In addition, in considering the merits of voluntary versus mandatory testing, these facts about AIDS must be kept in mind:

- 1—AIDS is caused by an infectious agent, and therefore is an infectious disease. Appropriate precautions, procedures, and policies should be applied to protect the community from the spread of the disease.
- 2—The extent to which the AIDS virus already has spread into the general population is not completely understood. Current projections are based on a number of unverified assumptions.
- 3—The transmission of the AIDS virus does not occur through casual contacts. Sexual contact, septic intravenous equipment, and the administration of infected blood and blood products are the main modes of transmission.
- 4—Heterosexual transmission of the AIDS virus, especially from males to females, does occur.

- 5—Seropositive pregnant females will transmit the virus to their babies in a high percentage of cases.
- 6—Health care workers, especially those who perform invasive surgical procedures, and emergency room and laboratory personnel, are at some risk when caring for AIDS patients.
- 7—No patient with a clinical case of AIDS has survived the disease. The disease has been uniformly fatal.
- 8—The disease, not its victims, is the threat from which society must be protected.
- 9—The confidentiality of the doctor-patient relationship is vitally important but not absolute.
- 10—Physicians have an ethical and professional obligation to behave in a scientifically responsible manner.

All of these considerations guided the Board of Trustees as it considered the issues that have been raised by the wide variety of proposals for HIV-antibody testing that are being discussed in society.

General Conclusions

Except for individuals in the limited categories listed in Recommendation 5 (blood, organ and semen donors, immigrants, military personnel, prison inmates) with regard to whom testing serves well-established and well-accepted protection goals, mandatory national testing should not, at present, be broadly extended.

Military personnel have traditionally been subject to mandatory immunizations and our defense forces, of course, must be as strong as possible. Prison inmates, because they are confined and have a higher incidence of high-risk individuals than the general population, require special protection.

Immigrants should be tested so that we can focus on the AIDS problem already here, and the nation certainly has the right to bar entrants with communicable diseases. The need to test donors of blood, organs and semen has never been questioned.

Public health authorities have advanced a plausible premise for their opposition to mandatory testing of homosexuals and drug abusers: Such testing will only drive people underground and away from the health care system.

Public health authorities also have advanced a premise for not requiring mandatory testing of large segments of the general population, such as all those seeking marriage licenses or all those admitted to hospitals: Such testing in low prevalence populations would result in a high proportion of false positives, and would not be cost-effective, given the demand for voluntary testing and the shortage of testing and counseling resources for those who want them voluntarily or who will want them following effective public awareness campaigns.

Until those premises are shown by superior studies to be incorrect, a policy regarding mandatory testing that has been rejected by the vast majority of public health officials, including the Centers for Disease Control and the surgeon general, cannot be recommended.

But certain high-risk groups should be regularly tested, with a right to informed consent and to refuse the test. Those groups are defined in Recommendation 6.

In addition, physicians and other hospital personnel involved in invasive surgical procedures who necessarily and unavoidably come in contact with the blood of patients, need to be aware of their risks.

Limited regular testing of patients will assure that the CDC guidelines for the protection of hospital personnel are followed rigorously and will further assure that all patients receive prompt and full treatment. The Board emphasizes here that physicians have a long and honored tradition of tending to patients afflicted with infectious diseases with compassion and

courage. That tradition must and will be continued throughout the AIDS epidemic.

Because the risk to health care personnel will be slight in most areas, any effort at mandatory testing of certain kinds of patients should be instituted after voluntary testing has failed and where a variety of factors, e.g., the costs and availability of proper testing and counseling as measured against the risk presented by the relative presence of a high-risk patient population, weigh in favor of mandatory testing.

The AMA does not believe it appropriate at this time to extend regularly offered testing to persons other than those listed, e.g., recommended testing should not be extended to all individuals anywhere who are considering marriage or to all persons in hospitals. Decisions about whether there should be generally recommended testing to other types of individuals should, at this time, be left to the decision of the local community depending on its own circumstances and the judgments of its own public health officials.

At present, each case of AIDS must be reported by the individual physician to state public health authorities either by name or identifier. Anonymous, or if carefully implemented, confidential reporting should also be extended to all confirmed instances of persons infected with AIDS virus but not afflicted with ARC or AIDS.

Individuals who are seropositive for the HIV antibody are infected with the virus and can spread the disease as certainly as those with symptoms of AIDS. A sound epidemiologic understanding of the potential impact of AIDS on society requires the reporting of those who are confirmed as testing positive for the antibody to the AIDS virus.

Testing Recommendations

RECOMMENDATION 4: Tests for the AIDS virus should be readily available to all who wish to be tested. The tests should be routinely subsidized for individuals who cannot afford to pay the cost of their test.

RECOMMENDATION 5: Testing for the AIDS virus should be mandatory for donors of blood and blood fractions, organs and other tissues intended for transplantation in the U.S. or abroad, for donors of semen or ova collected for artificial insemination or in vitro fertilization, for immigrants to the United States, for inmates in federal and state prisons, and for military personnel.

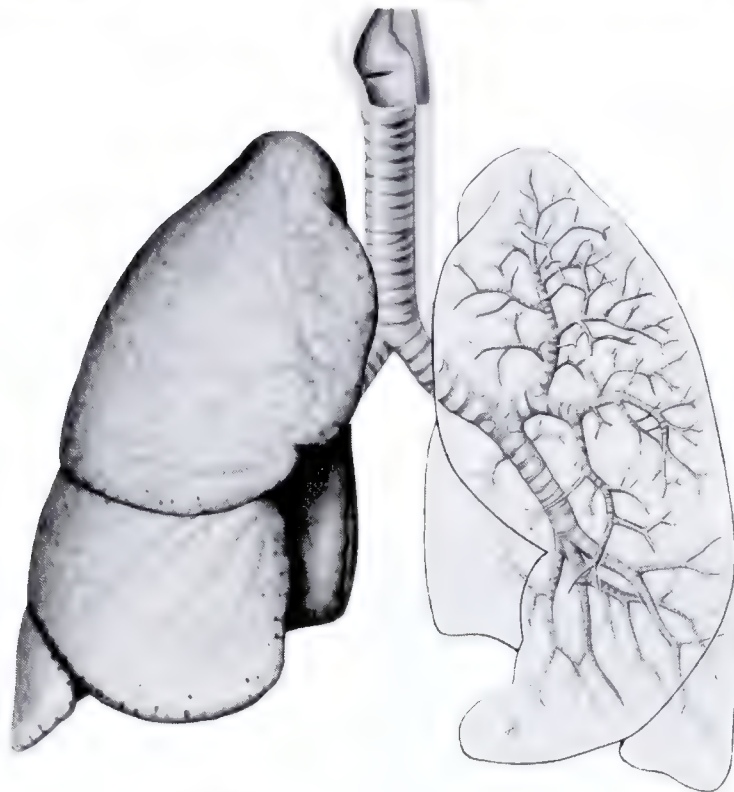
RECOMMENDATION 6: Voluntary testing should be regularly provided for the following types of individuals who give an informed consent:

- 1— Patients at sexually transmitted disease clinics.
- 2— Patients at drug abuse clinics.
- 3— Pregnant women in high-risk areas in the first trimester of pregnancy.
- 4— Individuals who are from areas with a high incidence of AIDS or who engage in high-risk behavior seeking family-planning services.
- 5— Patients who are from areas with a high incidence of AIDS or who engage in high-risk behavior requiring surgical or other invasive procedures. If the voluntary policy is not sufficiently accepted, the hospital and medical staff should consider a mandatory program for the institution.

RECOMMENDATION 7: As a matter of medical judgment, physicians should encourage voluntary HIV testing for individuals whose history or clinical status warrant this measure.

(Continued on page 299)

Consider the causative organisms...



Ceclor[®]
ceclor

250-mg Pulvules[®] t.i.d.
offers effectiveness against
the major causes of bacterial bronchitis

Haemophilus influenzae, *Streptococcus pneumoniae*
(ampicillin-susceptible and ampicillin-resistant)

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor[®] (ceclor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β -hemolytic streptococci)

Contraindication:
Known allergy to cephalosporins.

Warnings:
CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.
Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of non-susceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

- Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%

• Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.

• Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

• Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

• As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

• Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

• Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly)

[072886R]
PA 8794 AMP

©1987, ELI LILLY AND COMPANY



700241

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

**Strong.
Sensible.
Sound.**



Medical Insurance Exchange of California

Professional Liability Insurance Exclusively.

Sponsored by Hawaii Medical Association.

6250 Claremont Avenue, Oakland, California 94618-1324

Telephone (415) 428-9411, outside California (800) 227-4527

Or call Hawaii Medical Association, 536-7702

And you own it.

AIDS

(Continued from page 296)

RECOMMENDATION 8: Individuals who are found to be seropositive for the AIDS virus should be reported to appropriate public health officials on an anonymous or confidential basis with enough information to be epidemiologically significant.

RECOMMENDATION 9: Physicians should counsel patients before tests for AIDS to educate them about effective behaviors to avoid the risk of AIDS for themselves and others. In public screening programs, counseling may be done in whatever form is appropriate given the resources and personnel available as long as effective counseling is provided.

RECOMMENDATION 10: Physicians should counsel their patients who are found to be seropositive regarding (a) responsible behavior to prevent the spread of the disease, (b) strategies for health protection with a compared immune system, and (c) the necessity of alerting sexual contacts, past (5 to 10 years) and present, regarding their possible infection by the AIDS virus. Long-term emotional support should be provided or arranged for seropositive individuals.

RECOMMENDATION 11: Patients should knowingly and willingly give consent before a voluntary test is conducted.

Resources

Only recently has Congress and the administration begun to seriously consider the vast resources needed to deal effectively with AIDS. Federal funding for 1988 is expected to reach \$1 billion. But that amount will not be enough. The AMA endorses the bill introduced by Congressman Waxman to increase resources for testing and counseling.

Testing for HIV virus in America will require substantially more resources than are currently being made available. Trained counselors, materials for counseling, and research on effective counseling approaches, for the variety of population groups that need these services, are urgently required. Also, dependable testing facilities with sufficient capacity to respond to the epidemic are needed now. In addition, funds for research and care must be increased to fully exploit the nation's capacity to respond effectively to this crisis.

The key premise of a prevention strategy, when there is no vaccine, is behavioral change on the part of those infected and those at risk of infection by AIDS virus. It is therefore crucial that there be immediate and systematic studies conducted of how behavior of affected groups may have changed in recent years, and if possible, what factors caused the changes.

Most particularly, it is necessary to study and evaluate the types of counseling that have been effective so that the techniques may be replicated widely. There can be little question that in a free society suasion and voluntary change, if effective, are far preferable to compulsion.

RECOMMENDATION 12: Public funding must be provided in an amount sufficient (1) to promptly and efficiently counsel and test for AIDS, (2) to conduct the research necessary to find a cure and develop an effective vaccine, (3) to perform studies to evaluate the efficiency of counseling and education programs on changing behavior, and (4) to assist in the care of AIDS patients who cannot afford proper care or who cannot find appropriate facilities for treatment and care.

Protection Against Discrimination

Anti-Discrimination. The AMA believes strongly that AIDS

victims and those who test positively for the antibody to the AIDS virus should not be treated unfairly or suffer from arbitrary or irrational discrimination in their daily lives.

Last year, the AMA filed a friend of court brief in *School Board of Nassau County vs. Arline*, a case before the Supreme Court that addressed the question of how the federal handicapped anti-discrimination laws should apply to persons afflicted with contagious diseases. The AMA set forth a framework for the application of the law that the Supreme Court adopted, quoting verbatim from the AMA brief in its key holding.

A sound anti-discrimination approach does not allow reflexive discrimination against AIDS victims based on fear or stereotype or prejudice. Nor does it require that all employers or other federal fund recipients automatically accommodate a person afflicted with a communicable disease.

Instead, based on an individualized analysis of the nature and duration of the communicability, a federal fund recipient must make a reasonable accommodation based on reasonable medical judgments, given the state of medical knowledge at the time. This sound framework for carefully balancing the two competing concerns — the right of the victim to be free from irrational acts of prejudice and the right of others to be protected against an unreasonable risk from disease — should also guide state anti-discrimination efforts.

A key question left open by the Supreme Court is whether a person who is not afflicted with AIDS or AIDS-Related Complex, but who nonetheless tests positive for the antibody, is protected by the federal anti-discrimination law.

In order to encourage people to seek counseling, and testing if necessary, the AMA strongly urges that anti-discrimination laws at both the federal and state levels be clarified either by regulatory interpretation or statutory amendment to cover those who test HIV antibody positive. Allowing irrational discrimination against those who test positive serves no useful purpose: It only has the destructive effect of removing those who are otherwise productive members of society from the workforce or otherwise denying them access to an important aspect of normal life.

While the federal law should continue to apply only to federal fund recipients, state laws should be sought to prevent irrational discrimination by entities or individuals within those jurisdictions.

RECOMMENDATION 13: Anti-discrimination laws must be clarified or amended to cover those who test positive for the antibodies to the AIDS virus.

Confidentiality. The ability of the health care community to maintain the confidentiality of patient information and restrict its use to only those purposes essential for maintenance of health is, like clarification of anti-discrimination laws, vital to an effective program of preventing and controlling AIDS. Even if anti-discrimination laws were completely effective, which unfortunately is not likely, persons who test positive (such as those with ARC or AIDS), will suffer stigma. Thus, confidentiality is crucial.

The basic principle should be that access to patient information should be limited only to health care personnel who have a legitimate need to have access to the information in order to assist the patient or to protect the health of others closely associated with the patient.

As with anti-discrimination laws, laws protecting the confidentiality of patient information should be on both federal and state agendas.

RECOMMENDATION 14: Model confidentiality laws must be drafted that can be adopted at all levels of government to

encourage as much uniformity as possible in protecting the identity of AIDS patients and carries, except where the public health requires otherwise.

Questions for the Future

As the national debate on prevention and control of AIDS continues, other important issues will need to be addressed.

Research and Data. There is an urgent and critical need for more scientifically sound data on the prevalence and spread of virus in the general population. At the present time only those cases that meet the current CDC surveillance definition of AIDS are reported to that institution. Since AIDS is the terminal and fatal stage of HIV-infection, it represents only the tip of the huge HIV-infection iceberg.

There are protean manifestations of HIV-infection ranging from infected asymptomatic to full-blown AIDS. How large the base of that iceberg really is — that is, how many people are actually infected — can only be estimated from the number of reported AIDS cases. That has been done by using a multiple (50 to 100 times the number of AIDS cases) that has been extracted largely from surveys done in high-prevalence areas.

Yet this same multiple has been used to estimate the number of current and potential HIV-infected persons in low-prevalence areas and for that matter the entire country and even the world. The CDC itself is unsure about the accuracy of its estimates. Yet if economic and medical plans are to be made for the future, reliable projections must be available.

How sufficient or exaggerated these plans may be depends upon the accuracy of current and future estimates of HIV-infected persons, particularly as to the extent of its spread into the low-risk heterosexual population.

Not only are accurate estimates of HIV-infected persons needed, but so too are reliable data on the rate conversion of asymptomatic seropositive persons to clinical illness, including AIDS, that requires increased medical care. This information is important for the formulation of plans for the future cases of potentially hospitalizable patients and the economic consideration thereof. HIV-infection has protean manifestations and death can result not from AIDS itself, but from severe ARC or progressive CNS disease as well.

In order to obtain accurate information in HIV infected persons on the rate of conversion from asymptomatic to clinically severe illness, baseline data on their serologic status must be obtained as early as possible — not after clinically manifest disease is present. The presence of HIV antibodies indicates not only current infection with the virus, but also that the patient is potentially capable of transmitting the disease.

This follows from the fact that HIV integrates its genome into the host cell genome with the result that once infected, the patient remains infected for life and is, therefore, capable of life-long transmission of the agent. The earlier the infected person is detected, the earlier he or she may be advised of this contagious state and counseled on how to avoid further transmission of this lethal virus.

RECOMMENDATION 15: Consistent with the proposal by the Secretary of Health and Human Services, a national study in various areas of the country must be immediately undertaken to

determine the prevalence and conversion rate of the virus in the U.S. population, and the study must be repeated at appropriate intervals to gauge the spread of the disease.

Warning to Third Parties. One of the more difficult issues for society is how to warn unsuspecting spouses or sexual partners of persons who test HIV positive. Such a warning would allow the third party to practice "safer" sex or to abstain from sexual relations with the infected person altogether.

Given the life-or-death consequences, the unsuspecting third party should, as a general matter, be warned because there is no cure and because it may not be responsible to rely solely on the infected person to provide a suitable warning.

Physicians who have reason to believe that there is an unsuspecting sexual partner of an infected individual should be encouraged to inform public health authorities. The duty to warn the unsuspecting sexual partner should then reside in the public health authorities as well as the infected person and not in the physician to the infected person.

The AMA believes that mechanisms, analogous to those used by public health authorities to warn sexual partners about other sexually transmitted diseases, should be put in place to warn unsuspecting third parties about an infected sexual partner. Such warning may be appropriate whether the infected person is bisexual, heterosexual or homosexual.

This problem raises the general question of whether anonymous reporting should continue to be the standard of persons who test seropositive. Our recommendation at this time is limited situations where physicians or health officials already know the identity of the AIDS carrier and have reason to believe a risk to third parties exists.

RECOMMENDATION 16: Specific statutes must be drafted which, while protecting to the greatest extent possible the confidentiality of patient information, (a) provide a method for warning unsuspecting sexual partners, (b) protect physicians from liability for failure to warn the unsuspecting third party, but (c) establish clear standards for when a physician should inform the public health authorities, and (d) provide clear guidelines for public health authorities who need to trace the unsuspecting sexual partners of the infected person.

Sanctions for Reckless Disregard for the Safety of Others. A related question that must be explored is whether an infected person, who knows he or she is infected and who knowingly fails to warn a sexual partner of the infection, should be subject not just to tort suits, but to a proceeding brought by state authorities to sanction the individual.

RECOMMENDATION 17: Given the risk of infection being transmitted sexually, and given the dire potential consequences of transmission, serious consideration should be given to sanctions, at least in circumstances where an unsuspecting sexual partner subsequently finds out about a partner's infection and brings a complaint to the attention of authorities. Pre-emptive sanctions are not being endorsed by this recommendation.

Conclusion

The Board intends to review its evaluation of the developing AIDS epidemic on a constant basis. Modifications of the AMA's positions will be made as the situation warrants.

Anti-Rh (D) Immunoglobulin Use for Immune Thrombocytopenic Purpura

Robert T.S. Jim, MD*

Anti-Rh(D) immunoglobulin can raise the platelet count in idiopathic thrombocytopenic purpura (ITP)¹⁻⁵ and may be an alternative to i.v. gamma globulin. In this report anti-Rh(D) immunoglobulin was tried in a patient with chronic ITP.

Case Report

A 41-year-old Caucasian male with chronic ITP since November 1984 was given 300 micrograms (1 c.c.) i.m. of anti-Rh(D) immunoglobulin (RhoGam, Ortho Diagnostics Systems). Previously, he had been treated with steroids, colchicine, cyclophosphamide and danazol with only transient benefit. He was on no treatment for five months prior to being given anti-Rh(D) immunoglobulin and his platelet count during that period was in the 20,000-35,000/cmm range.

After the injection of anti-Rh(D) immunoglobulin, the platelet count increased from 20,000 to 132,000/cmm in 28 days and returned to 18,000/cmm 57 days later (see figure). A second dose of anti-Rh(D) immunoglobulin of 600 micrograms (2 c.c.) i.m. produced no significant platelet increase. No adverse clinical effects were observed after both injections.

Discussion

Baglin et al. reported the use of as little as a single dose of 100 micrograms of anti-Rh(D) immunoglobulin to be effective in raising the platelet count in ITP.² Other cases have required larger doses up to 3,000 micrograms per day for four days.⁴

The platelet rise usually lasts less than four weeks, but remissions of more than five months have been observed in several cases.²

In our case, a single dose of 300 micrograms of anti-Rh(D) immunoglobulin resulted in improvement in platelet count over a 45- to 50-day period, similar to the response observed by Baglin et al.³ However, a second larger dose (600 micrograms) resulted in no improvement, and is unexplained. The mechanism for improvement in ITP is unknown. Anti-Rh(D) immunoglobulin can be another inexpensive therapy for ITP.

REFERENCES

1. Salama A, Mueller-Eckhardt C and Kiefel V: Hypothesis: Effect of Intravenous Immunoglobulin In Immune Thrombocytopenia. *Lancet*: 2:193, 1983.
2. Salama A and Mueller-Eckhardt C: Anti-Rh(D) Immunoglobulin for Immune Thrombocytopenic Purpura. *Lancet*: 2:49, 1986 (July 5).
3. Baglin TP, Smith MP and Boughton BJ: Rapid and Complete Response of Immune Thrombocytopenic Purpura to a Single Injection of Rhesus Anti-D Immunoglobulin. *Lancet*: 1:1329, 1986 (June 7).
4. Baglin TP, Smith MP and Boughton BJ: Anti-Rh(D) Immunoglobulin for Immune Thrombocytopenic Purpura. *Lancet*: 2:49, 1986 (July 5).
5. Durand JM, Harle JR, Verdote JJ, Weiller PJ and Mongin M: Anti-Rh(D) Immunoglobulin for Immune Thrombocytopenic Purpura. *Lancet*: 2:49, 1986 (July 5).

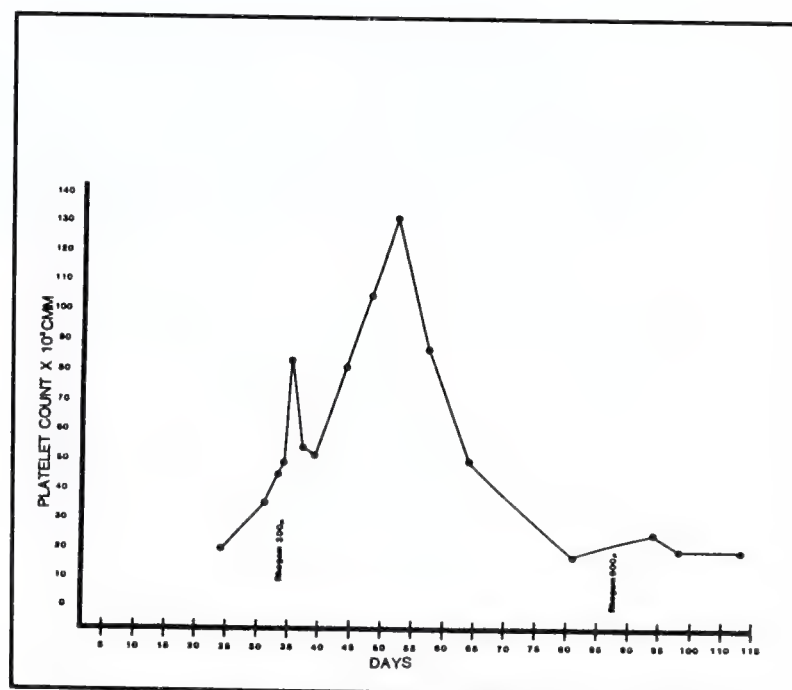


Figure: The effect of anti-Rh(D) immunoglobulin on platelet count.

* Professor of Medicine
University of Hawaii School of Medicine

Accepted for publication June 1987

INSTRUCTIONS TO AUTHORS HAWAII MEDICAL JOURNAL

SUMMARY OF REQUIREMENTS

Type manuscript double spaced, including title page, abstract, text, acknowledgments, references, tables, and legends.

Each manuscript component should begin on a new page, in this sequence:

Title

Text

Acknowledgments

References

Tables: each table, complete with title and footnotes, on a separate page

Legends for illustrations

Illustrations must be good quality, unmounted glossy prints usually 12.7 by 17.3 cm. (5 by 7 in.) but no larger than 20.3 by 25.4 cm. (8 by 10 in.).

SUBMISSION OF MANUSCRIPTS

Mail the manuscript in a heavy paper envelope, enclosing the manuscript and figures in cardboard, if necessary, to prevent bending of photographs during mail handling. Place photographs in a separate, smaller, heavy paper envelope.

Manuscripts should be accompanied by a covering letter from the author who will be responsible for correspondence regarding the manuscript. The covering letter should contain a statement that the manuscript has been seen and approved by all authors. Include copies of any permissions needed to reproduce published material or to use illustrations of identifiable subjects. Mail to Editor, Hawaii Medical Journal, c/o Hawaii Medical Association, 320 Ward Avenue, Suite 200, Honolulu, Hawaii 96814.

PREPARATION OF MANUSCRIPT

Type manuscript on white bond paper, 20.3 by 26.7 cm. or 21.6 by 27.9 cm. (8 by 10½ in. or 8½ by 11 in.) with margins of at least 2.5 cm. (1 in.). Use double spacing throughout, including title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: Title Page, Acknowledgments, References, Tables and legends. Number pages consecutively, beginning with the Title Page. Type the page number in the upper right-hand corner of each page.

Manuscripts will be reviewed for possible publication with the understanding that they are being submitted to one journal at a time and have not been published, simultaneously submitted, or already accepted for publication elsewhere. This does not preclude consideration of a manuscript that has been rejected by another journal or of a complete report that follows publication of preliminary findings elsewhere, usually in the form of an abstract. Copies of any possibly duplicative published material should be submitted with the manuscript that is being sent for consideration.

TITLE PAGE: The title page should contain (1) the title of the article, which should be concise but informative; (2) a short running head or footline of no more than 40 characters (count letters and spaces) placed at the top of the title page; (3) first name, middle initial, and last name of each author, with highest academic degree(s); (4) name of department(s) and institution(s) to which the work should be attributed; (5) disclaimers, if any; (6) name and address of author responsible for correspondence about the manuscript; (7) names and address of author to whom requests for reprints should be addressed, or statement that reprints will not be available from the author; (8) the source(s) of support in the form of grants, equipment, drugs, or all of these.

TEXT: The text of observational and experimental articles is usually—but not necessarily—divided into sections with the headings: Introduction, Methods, Results, and Discussion. Long articles may need subheadings within some sections to clarify their content, especially the Results and Discussion sections.

Introduction: Clearly state the purpose of the article. Summarize the rationale for the study or observation. Give only strictly pertinent references, and do not review the subject extensively.

Methods: Describe your selection of the observational or experimental subjects (patients or experimental animals, including controls) clearly. Identify the methods, apparatus (manufacturer's name and address in parenthesis), and procedures in sufficient detail to allow other workers to reproduce the results. Give references to established methods, including statistical methods; provide references and brief descriptions of methods that have been published but are not well known; describe new or substantially modified methods, give reasons for using them, and evaluate their limitations.

Include numbers of observations and the statistical significance of the findings when appropriate. Detailed statistical analyses, mathematical derivations, and the like may sometimes be suitably presented in the form of one or more appendices.

Results: Present your results in logical sequence in the text, tables, and illustrations. Do not repeat in the text all the data in the tables and/or illustrations: emphasize or summarize only important observations.

Discussion: Emphasize the new and important aspects of the study and conclusions that follow from them. Do not repeat in detail data given in the Results section. Include in the Discussion the implications of the findings and their limitations and relate the observations to other relevant studies. Link the conclusions with the goals of the study but avoid unqualified statements and conclusions not completely supported by your data. Avoid claiming priority and alluding to work that has not been completed. State new hypotheses when warranted, but clearly label them as such. Recommendations, when appropriate, may be included.

ACKNOWLEDGMENTS: Acknowledge only persons who have made substantive contributions to the study. Authors are responsible for obtaining written permission from everyone acknowledged by name because readers may infer their endorsement of the data and conclusions.

REFERENCES: Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals. References cited only in tables or in legends to figures should be numbered in accordance with a sequence established by the first identification in the text of the particular table or illustration.

Use the form of references adopted by the U. S. National Library of Medicine and used in *Index Medicus*. The titles of journals should be abbreviated according to the style used in *Index Medicus*.

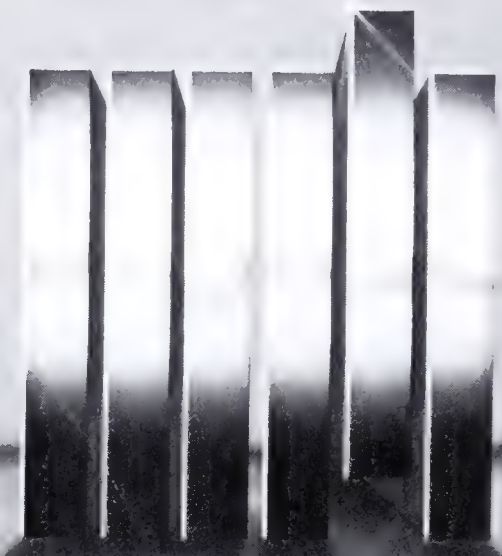
TABLES: Type each table on a separate sheet; remember to double space. Number tables consecutively and supply a brief title for each. Give each column a short or abbreviated heading. Place explanatory matter in footnotes, not in the heading. Explain in footnotes all nonstandard abbreviations that are used in each table. For footnotes, use the following symbols in this sequence: *, †, ‡, §, ¶, **, ††. . . . Identify statistical measures of variations such as SD and SFM.

ILLUSTRATIONS: Submit the required number of complete sets of figures. Figures should be professionally drawn and photographed; freehand or typewritten lettering is unacceptable. Instead of original drawings, roentgenograms, and other material, send sharp, glossy black-and-white photographic prints, usually 12.7 by 17.3 cm. (5 by 7 in.) but no larger than 20.3 by 25.4 cm. (8 by 10 in.). Letters, numbers, and symbols should be clear and even throughout, and of sufficient size that when reduced for publication each item will still be legible. Titles and detailed explanations belong in the legends for illustrations, not on the illustrations themselves.

Each figure should have a label pasted on its back indicating the number of the figure, the name of the authors, and the top of the figure. Do not write on the back of the figures or mount them on cardboard, or scratch or mar them using paper clips. Do not bend figures.

LEGENDS FOR ILLUSTRATIONS: Type legends for illustrations double spaced, starting on a separate page with arabic numerals corresponding to the illustrations. When symbols, arrows, numbers, or letters are used to identify parts of the illustrations, identify and explain each one clearly in the legend. Explain internal scale and identify method of staining in the photomicrographs.

Pension Fund Accounting Rules Are Changing. Maybe Your Investment Strategy Should Too.



MANAGEMENT OF MANAGERS

If you've been re-evaluating your pension fund investment strategy, you're not alone.

Some of America's most successful companies are now taking a second look at their pension strategies in light of recent regulatory developments. And turning to Management Of Managers: a new performance-driven investment option.

Management Of Managers is a multi-manager investment program developed by the asset management consulting specialists of Evaluation Associates Investment Management Company.

This state-of-the-art investment alternative gives you easy access to the investment exper-

tise and strategic thinking of some of America's top-performing investment managers, and at the same time, offers instant portfolio diversification—and a new degree of executive convenience.

Our objective: maximum investment performance with reduced volatility. And a minimum investment of your time.

If the investment objective of your pension fund is consistent, superior, long-term performance—with reduced risk—you should look into Management Of Managers.

For more information, please call **Paul Jaffe** or **Ron Freeman** at (808) 536-6977.

***In Hawaii, it's smart to
know someone with . . .***

M&NY
FINANCIAL SERVICES



MANAGEMENT OF MANAGERS
Performance Made Simple.

*The Mutual Life Insurance Company of New York,
New York, New York 10019*

Pacific Headquarters, Pacific Tower, Suite 2800, 1001 Bishop Street • Honolulu, HI 96813

HOW TO REDUCE RECEIVABLES

WITH MIBS

MEDICAL INFORMATION and BILLING SYSTEM

MIBS is an advanced outpatient medical billing system. MIBS is a total in-house system utilizing an IBM PC/AT or PC/XT. MIBS is designed for Hawaii's Physicians including extensive capability for HMSA insurance claim processing. This system offers the following advantages:

- **Daily Billing**

Processing billing statements daily or weekly improves cash flow and evens out clerical workload. A patient's first statement is based on when the first charge is available for billing. Accounts with an existing balance continue to receive one statement per month at the same time of the month. Daily billing improves cash flow by reducing the time between a patient's first visit and their first bill.

- **Collection Letters**

The practice can design and automatically generate collection letters for delinquent accounts. Practice generated collections letters are many times as effective as those sent by a pre-collection service.

- **Statement Dunning Messages**

Dunning messages on billing statements are based on the age of the account balance. This allows the practice to communicate the delinquency of the account to the patient.

- **Payment Plan**

Budget payment plans or "promise to pay" amounts can be set and tracked by MIBS. Budget payment amounts are printed on the billing statement.

- **Service Charge**

Assessing a service charge improves the collection rate. Many patients pay their accounts earlier to avoid a service charge.

- **Delinquent Account Report**

MIBS generates a report of delinquent accounts based on user specified criteria allowing the practice to focus collection efforts.



MIBS: MEDICAL INFORMATION and BILLING SYSTEM

Advanced medical billing + IBM PC Equipment (PC/XTTM or PC/ATTM)
+ extensive PPMS training + professional service + continuous support

For a DEMONSTRATION on how MIBS can improve your MEDICAL BILLING
Call Bill Liggett at 521-2397.

PPMS

Pacific Professional Management Systems, Inc.

1188 Bishop St. Suite 3010 Honolulu, Hawaii 96813 Ph. 521-2397

Symphalangism and Its Introduction into Hawaii: A Pedigree

Stephen A. Gaal, MD*

James R. Doyle, MD**

Ivar J. Larsen, MD***

Although phalangeal synostosis was first described by Mercier in 1838,¹ it remained for Harvey Cushing to coin the word symphalangism to describe a syndrome of hereditary stiffness in the PIP joints of the fingers.

In 1906 Cushing examined a woman with this condition and began a comprehensive study of her family over the next 10 years. He identified 302 affected individuals in 72 families, described the phalangeal changes, demonstrated the autosomal dominant nature of the trait through seven generations and published his findings in 1916.²

An even more comprehensive study of this pedigree, spanning 10 generations, was published in 1965 by Strasburger et al. and included 684 individuals of whom 351 were affected.³ This study by Strasburger confirmed an autosomal dominant mode of transmission.

Incidence

Symphalangism is stated to account for 0.6% of all congenital anomalies in the upper extremity in one series of 1,456 patients.⁴ It is most commonly reported in Caucasians, occasionally in Orientals, and seldom in Blacks.⁵ It is significant to note that Freud and Slobody reported on a family of American Indian and Negro descent involving four generations with 9 of 10 members showing symphalangism.⁶

Physical Findings and Related Conditions

Clinically, the characteristic physical finding is a stiff finger with absence of skin creases over the affected joint(s). The joints are almost always ankylosed in extension.⁵ (Fig. 1A). The condition is usually bilateral and the little finger is most frequently involved, followed by the ring and middle fingers and less commonly the index finger.^{3, 4, 7-11}

Recent studies have indicated that the finger stiffness may involve any of the interphalangeal joints or even the MP joints, although the PIP joint is the most commonly involved.^{4, 5, 11} The

other joints in the affected finger may exhibit compensatory hyperflexibility.⁵

X-ray findings may show partial or total bony ankylosis or misshaped joint surfaces with minimal joint space. The middle phalanx may also be shorter than normal (Fig. 1B). Osseous fusion in the clinically stiff joint does not occur until some years after birth, and osseous fusion is usually not complete until puberty.¹²

Individuals with symphalangism may show congenital fusion of other joints including the PIP joints of the second to fourth toes, intertarsal joints, intercarpal joints and portions of the lower cervical spine. Conduction type hearing loss has been described in some individuals with symphalangism due to bony fixation of the foot plate of the stapes over the oval window.

Genetic Considerations

Many rare traits in man occur in characteristic patterns in accordance with Mendelian laws. The specific pedigree pattern depends upon two factors: (1) Whether the mutant gene is located on an autosomal, or X chromosome, and (2) whether the effects of the gene are expressed from a single dose, i.e.



Figure 1A: The clinical appearance of symphalangism in a man. The stiff PIP joints in the middle, ring and little fingers are associated with absence of PIP joint skin creases.

* Orthopedic surgeon, Stockton, Calif.

** Chairman, Division of Orthopedics, Department of Surgery, John A. Burns School of Medicine, University of Hawaii.

*** Professor and Chairman (emeritus), Division of Orthopedics, Department of Surgery, John A. Burns School of Medicine, University of Hawaii. Chief Surgeon (emeritus) Shriners' Hospital for Crippled Children, Honolulu.

Accepted for Publication June 1987.

heterozygous, or from double dosage (the homozygous state). Depending on the type of chromosome bearing the gene, a trait is said to be autosomal or X-linked.

Secondly, depending on whether expression of the gene occurs in the heterozygous state or only in the homozygous state, a trait is said to be dominant or recessive respectively.^{13, 14} The pedigree presented in this article, as well as in other pedigrees of symphalangism, clearly establishes this trait as an autosomal dominant condition.^{2, 3} Since this trait is rare, the affected person is likely to marry an unaffected person and the chance of an offspring being affected is 50%.¹⁴

Similarly, the affected offspring is heterozygous and may with equal likelihood pass on either the normal chromosome or the one with the mutant gene to his or her offspring. Furthermore, since the gene is carried on the non-sex chromosome, both males and females are affected and can transmit it to both male or female offspring.¹⁴

Autosomal dominant traits are transmitted from affected parent to offspring by a single gene.^{13, 14} This gene appears to exert its effect at approximately eight weeks of gestation and prevents the formation of the joint cavity, resulting in immobility of the joint and ultimate bony fusion.³

The Pedigree (Case Report)

The pedigree in this case dates back to about 1870 when a 9-year-old Cherokee Indian arrived in the Hawaiian Islands on a whaling vessel. He remained in the islands and was adopted and raised by a Hawaiian family. The family reported that the patient had typical Cherokee features and was described as a tall male with "lanky" physique, high-set cheek bones and long stiff fingers.

Three of his four offspring were also reported to have similar finger characteristics. The pedigree covering five generations is given in Figure 2. A study of the members of the third to fifth generations revealed symphalangism of the fingers and toes, brachydactylism, conductive hearing loss, tarsal synostosis, spine synostosis, carpal synostosis and radial club hand deformity with absent thumb and hypoplastic radius.

The examination of all living individuals in the pedigree was done by one of the authors (S.A.G.) and included physical examination of the extremities and spine, a turning fork hearing test, photographs of the hands, feet and spine and, if indicated,

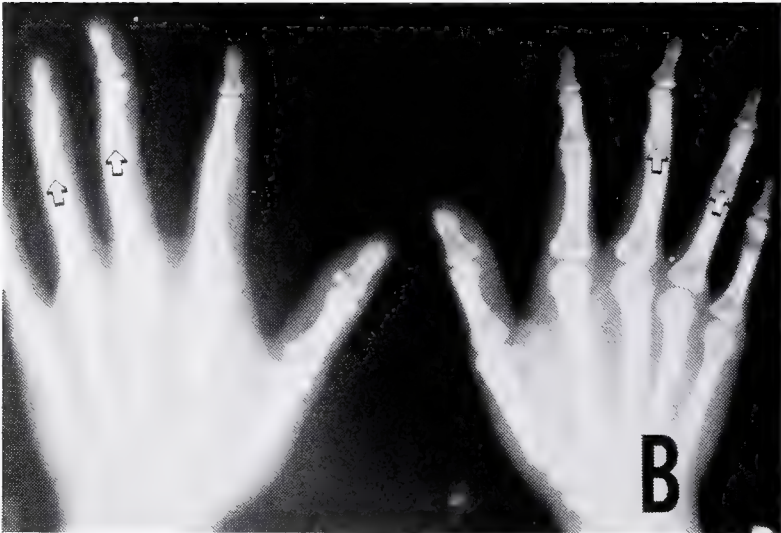


Figure 1B: X-ray appearance of symphalangism in an adult male showing complete fusion of the PIP joints of the middle, ring and little fingers. The index and thumb are normal.

X-rays of the hands, feet and cervical spine.

Chromosome studies were performed in IV-2, IV-5, V-1, V-15, 16, V-25. All chromosomes were normal in count and configuration. Three individuals in this pedigree with hearing loss had middle-ear surgery with successful correction of bilateral air-conduction deafness. The findings at surgery were those of various degrees of bony fixation of the foot plate of the stapes over the oval window.

Treatment

Although surprisingly good function is usually noted in patients with symphalangism, they may have difficulty in picking up small objects. It is significant to note that three members of the above-mentioned pedigree were typists, and one played the piano. Most surgeons believe that these stiff joints should not be operated on.^{5, 11} Neither arthroplasty nor positional change of digits into a more flexed position seems to result in improved function. Patients are generally not pleased with the results of surgery.

Conclusion

Although symphalangism is a rare congenital anomaly, its introduction into Hawaii is of historical as well as clinical significance. Even though symphalangism of the fingers is the most common joint problem observed with this autosomal dominant trait, it is also associated with carpal, tarsal and spine congenital fusions.

Perhaps the most important associated clinical finding, however, is congenital fixation of the stapes, with resultant conduction deafness, which is correctable by surgery.

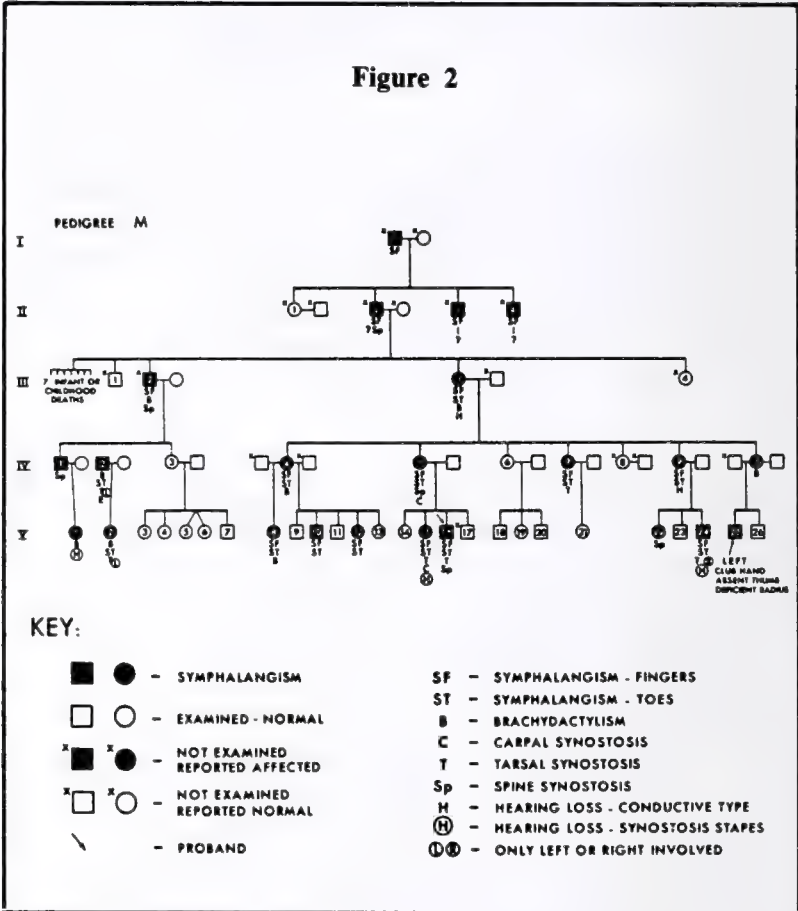


Figure 2: A pedigree of symphalangism that was introduced into Hawaii about 1870. The proband (V-16) demonstrated symphalangism of the fingers and toes, tarsal synostosis and spine synostosis. This pedigree demonstrates the autosomal dominant mode of transmission.

REFERENCES

1. Mercier LA: Absence hereditaire d'une phalange aux doigts et aux orteils. *Bull Soc Anat Paris*: 13:35, 1838.
2. Cushing H: Hereditary ankylosis of the proximal phalangeal joints (sympalangism). *Genetics*: 1:90-106, 1916.
3. Strasburger AK, Hawkins MR, Eldridge R, Hargrave RL and McKusick VA: Sympalangism: genetic and clinical aspects. *Johns Hopkins Hosp Bull*: 117:108-127, Aug. 1965.
4. Flatt AE, Wood VE: Rigid digits or sympalangism. *Hand*: 7:197-213, 1975.
5. Dobyns JH: Sympalangism, 227-81 in: Operative hand surgery, Green DP (ed) New York: Churchill Livingstone, 1982.
6. Freud P, Slobody LB: Sympalangism — A familial malformation. *Am J Dis Child*: 65:550-7, 1943.
7. Cole AE: Inheritance of a fused joint in the index finger: Ankylosis of distal interphalangeal joint of the index finger. *J Hered*: 26:225-8, 1935.

8. Dellon AL, Gaylor R: Bilateral sympalangism of the index finger. *J Bone Joint Surg (Am)*: 58:270-1, 1976.
9. Daniel GH: A case of hereditary anarthrosis of the index finger, with associated abnormalities in the proportions of the fingers. *Ann Eugen*: 7:281-96, 1936.
10. Pritchett JW: Bilateral sympalangism of the index fingers. *J Hand Surg*: 10A:619-20, 1985.
11. Flatt AE: The care of congenital hand anomalies, pp 146-70. St. Louis: CV Mosby, 1977.
12. Rochlin DG: Ueber die hereditare symmetrische gelenkhyoplasie. *Ztschr Konst Lehre*: 13:654, 1920.
13. Goldberg MJ, Bartoshesky LE: Congenital hand anomaly: Etiology and associated malformations. *Hand Clinics*: 1:405-15, 1985.
14. McKusick VA, Milch RA: The clinical behavior of genetic disease: Selected aspects. *Clin Orthop*: 33:22-39, 1964.

Clinical Pathologist's Easy Chair

FRANCIS FUKUNAGA, MD

Sputum Cultures

The quality and value of sputum cultures, like other laboratory tests, are dependent upon methods of collection and transport of the specimens. The major difficulty in interpreting bacterial cultures of expectorated sputum is the contamination by oral and nasopharyngeal material. Potential pathogens commonly colonize the oral cavity and nasopharynx.

Strep pyogenes is seen in 5% to 10%, *Strep pneumoniae* in 25%, *H. influenzae* in 40% to 80%, *Neisseria meningitidis* in 5% to 20%, *Candida* in 74%,¹ *Staph epidermidis* and *aureus*, *Alpha strep*, *enterococci* and *enterobacteriaceae* in about 2% of normals and up to 57% of moribund hospitalized patients.²

The macroscopic examination for mucus, blood or purulent material is NOT helpful in assessing the quality of sputum for culture.³ Since squamous epithelial cells are found only in the upper respiratory tract, their presence would suggest oropharyngeal contamination while neutrophils suggest material from the site of infection. Most experts recommend a gram stain of the sputum before culture to judge the quality of the specimen and to decide what types of culture media are required. Some organisms such as yeast may be overgrown by bacteria in the culture although they could have been identified in smears.⁴

There are many criteria for judging the acceptability of sputum specimens for culture. These criteria result in different percentages of rejected specimens.^{5, 6, 7} Trans-tracheal aspirates are considered ideal specimens. Sputum with less than 10 epithelial cells per LPF (low power field) most closely approximates the trans-tracheal specimen.

Many laboratories reject all sputum specimens with more than 25 epithelial cells per LPF and consider those with 10 to 25 per LPF as contaminated but satisfactory if there are more than 25 WBC per LPF.²

Gram stains of sputum are unreliable for identifying the etiologic organisms but fairly accurate if tracheal aspirates are examined.

The presence of *Strep pneumoniae* is strongly suggested if gram-positive lancet-shaped diplococci are seen (more than 10 per oil immersion field). However, about 40% will be missed, but deviation from this criterion will greatly reduce the overall accuracy.⁸

Cultures of expectorated sputum cannot reliably distinguish pathogens from non-pathogens because of the common colonization of the oropharynx by potential pathogens. These include *Strep pneumoniae*, *Staph aureus*, *H. influenzae*, *pseudomonas* and the *enterobacteriaceae*. Gram-negative organisms may become the predominant organisms in alcoholics, diabetics and the aged, especially if such patients are bedridden and hospitalized.

Blood cultures are helpful if positive, but are more often negative.⁹ Cultures of specimens not contaminated by oropharyngeal material are more easily interpreted. These include trans-tracheal and trans-thoracic aspirates, empyema fluid and surgically removed tissue.

REFERENCES

1. Murray PR et al: Should yeasts in respiratory secretion be identified. *Mayo Clin Proc*: 52:42-45, 1977.
2. Sodeman TA and Colmer J: Microbiology of the respiratory tract. *Lab Med*: 14:96-102, 1983.
3. Murray PR: Macroscopic and microscopic evaluation of respiratory specimens. *Clinics in Lab Med*: 2:259-267, 1982.
4. Heineman HS et al: Misinformation from sputum cultures without microscopic examination. *J Clin Microbiol*: 6:518-527, 1977.
5. Murray PR and Washington JA: Microscopic and bacteriological analysis of sputum. *Mayo Clin Proc*: 50:339-344, 1975.
6. Geckler RW et al: Microscopic and bacteriological comparison of paired sputa and tracheal aspirates. *J Clin Microbiol*: 6:396-399, 1977.
7. Heineman HS and Radano RR: Acceptability and cost savings of selective sputum microbiology in a community teaching hospital. *J Clin Microbiol*: 10:567-573, 1973.
8. Rein MF et al: Accuracy of Gram's stain in identifying pneumococci in sputum. *JAMA* 239:2671-2673, 1978.
9. Van Scoy RE: Bacterial sputum cultures. *Mayo Clin Proc*: 52:39-41, 1977.

REAL ESTATE OPPORTUNITIES

* FEE SIMPLE OCEANFRONT LISTINGS *

WAILUPE . . . at the end of a quiet lane a pleasant architect designed two bedroom two bath home awaits the new owner who will provide the tender loving care required to bring this lovely spot back to its original splendor. "Extras" in this spacious 3259 sq. ft. residence include a music or family room, library alcove, formal dining room, fireplace and a large workshop with an adjoining hobby room. \$550,000

WAIALUA . . . here is a simply divine, spotless, like new home in a setting that will keep your apron strings tied to the back lanai door! This sparkling two bedroom two bath home features large rooms, a den/3rd bedroom, walls of glass that frame the spectacular ocean view and a huge waterfront deck for those lazy afternoons and evening sunset watches. \$345,000.

NORTH SHORE "PIPELINE" . . . the ultimate setting for the bachelor, retired couple or lucky coupon clipping surfer! This attractive bedroom 1½ bath cottage features a front lanai that you won't leave except in duress! The sights and sounds of the ocean on this, Hawaii's most spectacular white sand beach, are simply not duplicatable. \$249,500.

Call Bill or Ginger Sinsabaugh (R)
for appointments.



Waterfront Properties
INC.

1188 BISHOP ST., #2407

531-5311

WAIALUA OCEANFRONT



This is your opportunity to own a touch of "Old Hawaii" for under a million. Your custom-designed two-story "Pole" house will allow peaceful enjoyment as well as the opportunity to entertain your friends and family. One bedroom/one bath cottage also included. Over 15,000 sq. ft. of FEE SIMPLE land. Take in the Polo games nearby and gourmet cooking in Haleiwa town. MLS 39016 Price: \$750,000.00.

Call Susan L. Burgess (RA) 734-4242 or
Nancy J. Bathen (R) 395-4565

HILL & CO.

specialists in fine residential properties

HONOLULU

373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821



LANIKAI BETTER THAN OCEANFRONT

Overlooking the ocean thru rustling palms, this custom built home is better than oceanfront! Sitting only 35 ft. from water's edge and just steps to a sandy cove, this is the best of both worlds — GREAT VIEWS, GREAT SECURITY & PRIVACY. Over 1/2 acre fee simple, 2 master suites, large pool and decks plus separate guest cottage in a one-of-a-kind ocean setting! mls 35967

\$1,275,000

Call Margy Grosswendt (R) 261-2334
or Joan Farrell (RA) 377-5712

Bradley
PROPERTIES LTD.
(808) 523-0456

1177 Kapiolani Blvd., Honolulu, HI 96814

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



NORTH SHORE OCEANFRONT!!

39,509 sq. ft. Fee Simple lot in fast developing area near Turtle Bay Hilton. Includes Duplex house - 3 bdrms./2 baths each. Sandy Beach. (MLS #34571)

\$495,000

Mary Alton (R) 988-3361

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

REAL ESTATE OPPORTUNITIES



features the Big Island's beauty and potential

- ★ Ten lush acres with 296 ft. of ocean frontage. The perfect location for your own country estate. Fabulous coastline with crashing waves and deep blue water. Price reduced to \$249,000.00. (F8). Any reasonable offer considered.
- ★ 22 acres in Kailua Kona on Queen Kaahumanu extension. Gently sloped, soil covered, has highway access and excellent views. Zoning permits subdivision into lots of 7,500 sq. ft. lots. \$850,000.00 (F8) and — also available — 137 plus acres in same area for \$1,500,000.00 (F8).
- ★ 5 acres Kailua Kona. Mountain and ocean views. Good AG land at the 1150 to 1200 ft. elevation. Partially fenced with rock walls. \$200,000.00 (F8).
- ★ 25 acres in Holualoa. Exceptional views of Kailua Bay and the Kona coast. AG land with possible subdivision. Access on Mamalahoa Highway. \$660,000.00 (F8).
- ★ .83 acres in Holualoa. Spectacular panoramic views of Kailua and ocean. \$80,000.00 (F8).
- ★ Keauhou-Kona Surf & Raquet Club. Lovely 2 bedroom 2 bath first floor end unit. 3 tennis courts and great swimming pool. Adjacent to golf course. Close to Keauhou shopping centre. \$190,000.00.

Call for additional information on oceanfront and mountaintop developments on all islands.

1060 Young St. 523-1381 Hono., HI 96814

SCULLY ROGERS LTD. PRESENTS



HAWAII'S MOST PRIZED PROPERTY OCEANFRONT FEE SIMPLE

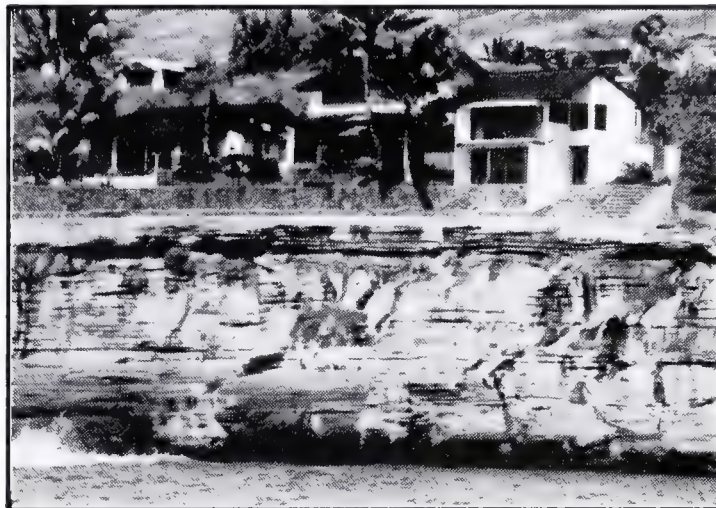
THE MAGIC OF MALAEKAHANA. OAHU'S MOST PERFECT BAY. QUIET. SECLUDED. 1.27 ACRES IN FEE SIMPLE. TO THOSE WHO KNOW AND SO APPRECIATE... A RARE, RARE FIND! NOW OFFERING A HALF INTEREST FOR ONLY.

\$225,000

Scully Rogers LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 715, Honolulu, Hawaii 96815



DRAMATIC OCEANFRONT ESTATE

Set high on cliffs above blue sea with Diamond Head in the distance ... 4 bedrooms, 5½ baths, over 6,000 sq. ft. under roof. Includes all CUSTOM FURNISHINGS (just completed). Huge 39,007 sq. ft. FEE SIMPLE lot.

Call to see!

\$3,850,000.....MLS 38537

CHRISTINE MORGAN (RA) 373-9581

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

REAL ESTATE SERVICES

Member: The Honolulu Board of Realtors and MLS
**A TOTAL STAFF — AND REALTY SERVICE
IN WAIANAE**



Anne White (RA)



Jill Johnson (RA)

Larry Hatfield (PB)
Madeline Mong (RA)
Doris Oshiro (RA)
Marie Hatfield (R)
Paul Carter (RA)
Sharon Moore (RA)
Bob Hoffman (RA)

Call:
696-8415

Alberta Keamo (RA)
Arch Cook (RA)
Valerie Cook (RA)
Denise Martin (RA)
C. Gay Hatfield (RA)
Phyllis Perry (RA)
Renee Kamikawa (RA)

PROPERTY OF THE MONTH

Fee Simple 2 bdrm. Penthouse
Makaha Shores \$145,000

HAWAII HATFIELD REALTY CORP.

85-833 Farrington Hwy., Waianae

SALES • VA/FHA • MANAGEMENT • NOTARY

Health Care Quality Improvement Act of 1986: A Personal Opinion

John H. Pearson, MD*

This Act, (PL 99-660), was passed by Congress and signed by the president in November 1986. Some provisions, including the process of the setting of rules by the Secretary of Health and Human Services, have gone in to effect already. However, full implementation is not expected to be completed until Oct. 14, 1989.

This Act is being presented to the medical profession as being a gracious instrument of protection for us when we act as members of any official peer-review panel. The protection that we are to be offered is immunity against *damages* from our actions, including treble damages in antitrust cases, when we act as members of such a panel. There are some catches, of course.

No immunity is granted — nor should it be — if the proceedings were “not fair,” or if there was no “reasonable belief that the action was in the furtherance of quality health care.” It seems unlikely that actions that are, in fact, clearly in the furtherance of quality health care would cause a liability under antitrust laws. Anyway, even without this law, there is already, today, in effect no liability when good faith has been used. The immunity is against damages, not against actually being sued.

There is, in this Act, provision for the awarding of costs if an allegedly aggrieved physician sues; but for a peer-review person or a hospital actually to collect their legal costs would probably take yet another expensive and lengthy suit! The peer-review physician(s) would have to prove frivolity, bad faith, etc.

The Act provides a number of protections for the professional being investigated. Most of these protections we already have in the bylaws of our various hospitals, with one or two exceptions. One of these protections (which happens to be in the Castle Medical Center's bylaws) is that the physician is entitled to a list of witnesses “who are likely to testify.” The second is a very critical one, namely that at the hearing, the physician is entitled to “representation” by an attorney. This is in the Act, and will shackle us all.

*Island Anaesthesia Inc.

Currently at Castle Medical Center, for example, the accused physician is NOT entitled to an attorney, but only to a physician adviser. At Queen's Medical Center, the physician may be “advised,” but not “represented” by an attorney. It is at the sole discretion of the hearing committee (or the hospital administration) to permit the defending physician to have his attorney present — as an adviser only. In such a case the committee may also have its attorney present.

In most instances in the past, attorneys have not been present. If the defending physician has an absolute right to have an attorney represent him, you may be sure that this right will be exercised.

The presence of attorneys will change the whole character of the hearing. It will no longer be primarily a peer-review process trying to evaluate standards of care. The hearing will become an adversarial proceeding, a legal game, with standards of patient care nowhere to be found. Can you imagine the duration of such a procedure? Adjournment after adjournment, continuation and hassle until the will of the peers on the committee is exhausted, and the committee gives up!

The peer-review members who have already given of their time for a distinctly unpleasant duty will be subject to rigorous cross-examination by a forensic specialist. **THIS DOES NOT SEEM LIKE PEER REVIEW!** Many of them will decline to serve, or if they do will not wish to subject themselves to prolonged adversarial proceedings, to abuse, and not even to receive compensation for their time. It is hard to see how this will improve the peer-review process.

States have the right, by special legislation, to implement this Act earlier than October 1989, **OR THEY MAY ELECT NOT TO IMPLEMENT THE ACT IN THEIR STATE.** If the State does nothing, the Act will go into effect automatically on Oct. 14, 1989.

The real business of the Act is to have a national data source at the Department of Health and Human Services where all of the following will be collected (because reporting is mandatory) and be available for public scrutiny:

1—Medical malpractice payments (including settlements, as well as payments made in satisfaction of a judgment).

2—Sanctions taken by the Boards of Medical Examiners.

3—Certain professional review actions that adversely affect the clinical privileges of a physician for longer than 30 days, OR if the health care entity accepts the surrender of a physician's clinical privileges while that physician was under investigation, OR in return for not conducting an investigation.

It is clearly stated in the Act that this reporting requirement is distinct from any obligation to report to state licensing authorities. Failure to report may entail a three-year loss of immunity, little though such immunity may be.

It is true that the Act provides some words on confidentiality. However, it specifically states in Sect. 427(b)(1) that "disclosure" may be made with respect to prior malpractice actions. What innuendos a patient's lawyer could fling forth if the defending physician had made as little as one settlement in the past!

The Act starts off in Sec. 402(1) with a pair of grossly misleading assumptions, which are unfair and insulting to the medical and dental professions. "The increasing occurrence of medical malpractice and the need to improve the quality of medical care have become nationwide problems. . . ."

Not so! It is the increasing occurrence of suits and of sympathy awards that demand diversionary action by legislators! In fact, the legal profession and the justice system, as it pertains to tort laws, have become nationwide problems of an astounding magnitude. If we meekly accept the insulting assumptions of the Act, what will they do to us next?

It is my personal view that this Act is an abomination. I suggest **MOST STRONGLY** that an attorney not be allowed at peer-review hearings, except under most unusual circumstances

— and then, for advice, not for representation. I submit that the quid pro quo for giving us an immunity that *we effectively already have* is the establishment of a federal data bank of adverse information that can be abused and which may be most misleading.

Many settlements are made just to avoid terrible legal costs, in cases where there is not the slightest medical mistake. These data will accumulate in the federal memory bank.

I think we all have been made aware of the mischievous release of information by the government, albeit with great declarations of innocent intent after the fact! The release of lists of recipients of high payments under Medicare and Medicaid programs, when in most cases, the individual represented a group of providers, and not a single individual, is another example.

Another is the listing of crude, unanalyzed mortality data from different hospitals, suggesting that some hospitals are death traps compared to others, whereas, in fact, the different hospitals had different population bases from which they drew their patients.

I think we must expect and demand that the Hawaii Medical Association examine this Act with care, and that it should attempt to represent the interest of all physicians. We should be diligent in attempting to bring the objections described above to the attention of all hospitals in the State, and to the notice of the Hawaii Dental Association as well.

I think we should see that our public laws serve us and our mission to our patients and not the functionaries of the Department of Health and Human Services. I also think that we ought to do all in our power to see that Hawaii exempts itself from this Act, as an urgent matter. This will require our participation in one of the next two legislative sessions.

Health Care Quality Improvement Act: Clarifications

There has been some confusion about the AMA's position regarding the Health Care Quality Improvement Act of 1986. It was described in detail in the April 1987 issue of the *HMSS Newsletter*.

The AMA did *not* support this legislation, even though we believe some aspects of the clearinghouse concept are important. Indeed, we testified before Congress in opposition to the legislation, in particular to the malpractice action reporting requirements which we believe will be counterproductive. In addition at about the same time that the Act was passed, we obtained agreement from the Department of Justice with our view that liability under the antitrust laws for good faith peer review should not occur. In a clear and persuasive letter to the AMA, Assistant Attorney General Charles F. Rule put those views of the Justice Department in writing.

We are now actively involved in seeking to amend the legislation to eliminate, where feasible, those aspects of the bill which are burdensome, unfair or unnecessary.

In addition, to insure that the clearinghouse will be administered fairly and with proper confidentiality safeguards, the AMA will propose that it, in partnership with the Federation of State Medical Boards, acts as the clearinghouse.

Incidentally, the Health Care Quality Improvement Act plainly does *not* remove existing state law protections for peer review files, nor, we believe, does it permit plaintiffs' malpractice lawyers to have access to the clearinghouse.

(Excerpted from *The Citation*, April 1, 1987, published by the AMA Office of General Counsel.)

Book Review



Understanding the Common Cold
Charles J. Cheslock, 142 pages, The Vantage Press.

This book is verbose. The syntax is frequently awkward. The author's findings are unsubstantiated. The bibliography is meager and the book adds little to the understanding of the common cold. Reading this book was not a profitable use of the reviewer's time.

The author has been a draftsman, a construction inspector, a forester and a roadside engineer. A statement on the flyleaf is as follows: "He draws his information from many sources, but he relies heavily on his years of personal observations and experiments conducted in the home setting." The preface states that the contents of the book are no more than a modest and unpretentious effort to present the author's personal opinions.

Cheslock concludes that the common cold is not catching. He feels that people don't catch cold from other people but that they give it to themselves by allowing their resistance to deteriorate for many secondary reasons.

The philosophy of the common cold is presented in the following quote: "We shall assume, then, that factors such as fatigue, certain emotional perturbations, lack of rest, unrepressive habits, bodily heat, perspiration and other similar conditions and circumstances are responsible for a person's susceptibility to catching a cold and that interference with body thermolysis by chilling — in the form of low temperature, cool drafts and cold winds — is the triggering factor that sets a cold in motion."

The author gives 10 rules for prevent-

ing a cold. These are presented as follows in abbreviated form:

- 1—Use discretion in your contacts with people who have colds.
- 2—Avoid fatigue.
- 3—Get regular rest.
- 4—Don't overindulge in food and drink.
- 5—Don't overheat yourself.
- 6—Control your emotions.
- 7—Beware of cool drafts when your tolerance is down.
- 8—Don't fear cold when your resistance is up.
- 9—Make adjustments to promote body thermolysis.
- 10—Pay attention to medical science in treatment of an acquired cold.

Conclusion: This book represents a combination of folklore and personal belief, which contributes very little to our understanding of the subject. Regardless of their derivation Cheslock's rules of conduct would likely benefit a person's general health.

Milton M. Howell, MD

"The Psychologically Battered Child"
James Garbarino, Edna Guttman, Janis Wilson Seeley and Jossey-Bass.

This small volume is intended for all professionals who work with children and families. It is well-organized and clearly written. The authors clarify issues involving psychological and emotional harm to children, perpetrated by adults, which are often ignored when not accompanied by physical abuse or neglect.

Psychological abuse and neglect are not separated but are discussed together as

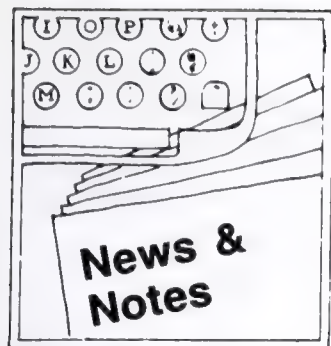
"psychological maltreatment," which the authors define as:

"A concerted attack by an adult on a child's development of self and social competence, a pattern of psychically destructive behavior. . . ." Five forms of maltreatment are described and defined. These are: Rejecting, Isolating, Terrorizing, Ignoring and Corrupting. The definition is explained by 20 case vignettes which illustrate the five categories of maltreatment in four age groups: Infancy, early childhood, school age and adolescence. Specific noxious parental behavioral tactics and how they affect children at various developmental stages, are described.

Two chapters address identification of maltreatment and the assessment of children and families that are affected. Three chapters discuss methods of intervention designed to reduce stresses on the family, to resolve problems among family members and to mobilize community resources. Two final chapters cover psychological maltreatment of children in group settings such as in day care centers and residential institutions.

The main value of this work lies in organizing this concept of psychological maltreatment. The relationship between specific harmful adult behaviors and demonstrable effects on children is emphasized. This approach could facilitate intervention by child protective agencies on behalf of abused children, even when visible physical injuries are not present. This should be required reading for pediatricians, child psychiatrists, psychologists, social workers and Family Court judges.

Elizabeth M. Adams, MD



HENRY YOKOYAMA, MD

Sportsmen

Marathon muse Jack Scaff on how to prevent overheating when running: "Once you get dry, swallow a drink . . . Get used to drinking fluids, lots of them . . . A rule of thumb is to drink 10 ounces of water for every 20 minutes you run, and to urinate four hours after you finish . . . The urine should be colorless once a day . . . You lose a pound of water for every three miles you run . . . The time to drink is before you need water, so tank up early . . . Blood is shunted from the stomach to exercising muscles . . . Drink at the beginning of a race; drink at the end of a race; and drink along the way . . .

Conference Notes . . .

Testicular Carcinoma, QMC/UH Lecture: Jeffrey Berenberg, Chief Hematology/Oncology, Tripler

Most common tumor in men ages 20-34

Risk: 20 to 40 times greater in men with cryptorchidism

Signs & Symptoms: Painless mass (80%); Ddx: varicocele, hydrocele, spermatocele, torsion, epididymitis

Spread: Local: a. retroperitoneal nodes b. Hematogenous: lungs, liver, brain

Staging: a. History, PE CBC, Profile

b. Chest X-ray

c. CT scan, lymphangiogram

d. Markers: Beta HCG, alpha Feto-protein, LDH

Treatment: Stage I: orchiectomy followed by retroperitoneal lymphadenectomy

Stage II: Same as above; chemotherapy

Stage III: Cis-platinum followed by surgical exploration for residual masses on Chest X-ray and CT scans . . .

Lichterisms

Pearls on low back pain by Rowlin Lichter . . . Willows: Nov. 18, 1986:

Over eight weeks' duration — serious . . .

Not everything is a disc . . .

Rapid deterioration — urgent . . .

Cauda Equina Syndrome — an emergency!

Diffuse problems need neurologist or psych help . . .

Always ask about sexual dysfunction — no shame!

Progressive dysfunction — urgent; Alternating — psych . . .

No change — need psych help . . .

Don't try to go it alone . . .

Don't argue — reassure . . .

Send the passive-aggressive to someone with time and experience . . .

Reassure and communicate with the Fearful . . .

Not all addicts are depressed, but many are . . . Speak openly . . .

The Support System may need help . . . counselor, priest, social worker, etc. . . .

Explain use of needs carefully and repeatedly . . .

Shoppers are probably seeking what you don't have . . .

Use ice, position, Feldene, placebo, etc., but never Percodan . . .

Re: Narcotics: Doctors may promote addiction . . . Stick to NSAID's and ice . . . No reason for Percodan . . . Don't use muscle relaxants . . . There are no muscle relaxants — only sedatives . . .

Don't use heat — ice works — ice gives diagnosis . . .

Recurrent LBA in past year due to: (1) Incomplete treatment — rehabilitate . . . (2) Chronic pain syndrome — get NP help . . . (3) Torsion injury (needs rehab or surgery).

Diabetes, knee injuries, i.e., debilitated illness . . . Punt to specialist . . .

Exercise — the primary screen for conservative care . . .

Depression comes in many forms — These people need help to get well . . .

If the patient doesn't like you — find him another MD . . .

Keep the insurer informed — they pay the bills . . .

Don't tell fat people to lose weight or leopards to remove their spots . . .

Beware the patient who delays RTW . . . With or without "recurrence" . . . Often insurer or attorney may help . . .

Push patient — establish a routine and a plan with goals . . .

Overcome your natural fear of attorneys . . .

Minimal findings and much fear . . . Watch for mimicry . . .

Professional Buyer's Guide HEALTH CARE & ORTHOPEDIC PRODUCTS

- Cervical Collars
- Abdominal / Rib Binders
- Orthopedic Supports / Lumbar Sacral, & Orthocast
- Extremity Braces Supports
- Sleep Pillows
- Wedge Recliner Pillows
- Posture Backrest
- Contourpedic Cushions
- Medical Massage Vibrators
- Cervical Traction Pillows
- Children's Furniture
- Executive, Secretarial & Lounge Furniture
- EZ Sleep Mattress / Pillows
- Adjusting - Therapy - Examination Tables

***Charge It: Use Your Credit Card
To Order Call TOLL-FREE
1-800-321-6870 (national)
1-800-238-7698 (in Ohio)**



Posture Support Mfg., Inc.
P.O. Box 39370
Solon, Ohio 44139

*When ordering ask for literature and price list

If you do business in Hawaii . . .

and find it valuable to know who's suing who or who's getting hit with tax liens, going bankrupt, getting incorporated, selling property, being dissolved, or getting promoted



**. . . we have
news for you**

For information call 521-0021.

Medical Offices Have a Choice! GET THE BEST



TRUE Multi-User Medical Computer Systems

Established Hawaii Client Base



MICRODYNE

THE
FULL SERVICE
COMPUTER
COMPANY

524-1740

677 Ala Moana Blvd. Suite 411



Over the Editor's Desk

STEPHEN R.P.K. BRADY, MD

HEALTH EFFECTS OF VDTs—The American Medical Association recently reviewed the literature concerning the human health effects of video display terminals (VDTs) (JAMA 1987; 257 (11): 1507-1512). The report, which is in general agreement with other reviews on the subject, points out that the almost undetectable amount of radiation from VDTs — both ionizing and non-ionizing — is not responsible for spontaneous abortions, birth defects and cataracts noted among VDT operators.

Other complaints, including musculoskeletal disorders, generally can be traced to factors in the workstation, or the task itself, (e.g., machine pacing, poor lighting, improper furniture) that can be modified or corrected. These factors are of an ergonomic nature; that is, they simply require that the workers' tasks, the implements or devices used in the job and the work environment be better fitted to the human.

The AMA encourages corporate management to be mindful of the relevance and importance of the man-machine interface, both to ensure the workers' health and well-being, and to improve work performance. The rewards for such concern will be a healthier and happier workforce and a higher-quality product.

Admittedly, we need to learn more about how workers are affected by this rapidly expanding technology. To that end, the AMA encourages and supports continuing investigation into the nature of VDT-worker complaints, with particular emphasis on ergonomics and other stress-reduction measures.

HAWAII EYE PHYSICIANS HELP ELDERLY RESIDENTS WITH EYE PROBLEMS RELATED TO DIABETES—Four elderly Hawaii residents have been examined and treated for a potentially blinding eye disease related to diabetes in a public service

Did you know?

Saint Francis Medical Center is one of the top three hospitals in Hawaii . . . and the fastest growing.

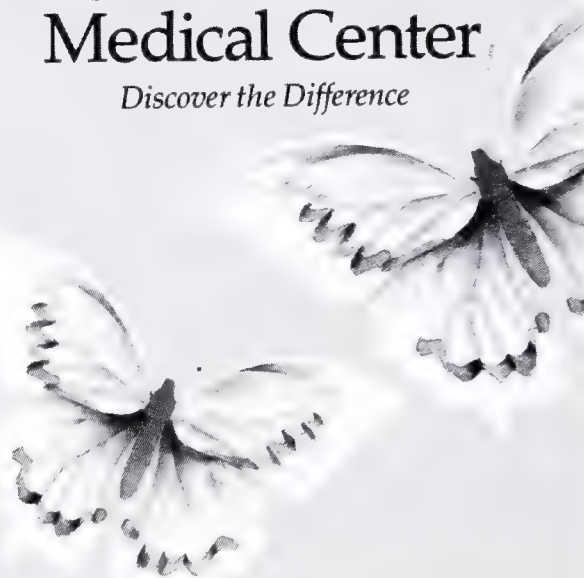
Leaders in quality health care.

Serving people of all faiths, beliefs, or ethnic backgrounds.



Saint Francis Medical Center

Discover the Difference



sponsored by the state's eye physicians and surgeons.

In addition, the program has uncovered more than 89 cases of cataracts, 9 cases of glaucoma, and 19 cases of macular degeneration — serious eye diseases that in many cases can lead to blindness. The project is designed to bring needed medical eye care and information to the nation's disadvantaged elderly.



Dr. Reppun



Dr. Luke

TWO CASTLE PHYSICIANS GRANTED UNIQUE MEDICAL STAFF STATUS—Two of Castle Medical Center's first practicing physicians, Dr. J.I. Frederick Reppun and Dr. Lincoln K.W. Luke, have been named to the honorary medical staff by the board of trustees and were recently honored by the medical staff on that conferral. Reppun is current editor of the HAWAII MEDICAL JOURNAL.

As honorary medical staff, Luke and Reppun have the unique distinction of being two of only three to have been granted the status by the hospital's board of trustees.

Both physicians were granted active status when the hospital first opened in early 1963 and currently are 100% office-based. They each have served as chief of staff, Reppun for three years and Luke for two, as well as terms as chairmen of the Family Practice Department. They have also served as members of several committees such as bylaws, credentials and utilization review.

Reppun has been in family practice here for the past 40 years. He also worked for about 10 years in the '50s and '60s with the late Dr. Robert Chung in the campaign to build a Windward Oahu hospital. That campaign resulted in what is today Castle Medical Center. During that time he served a term as the president of the Windward Oahu Community Association.

Luke has been in family practice since 1957.

KOKUA

Since 1979, high standards of integrity and professionalism have enabled Kokua Nurses to become the top temporary medical placement company in Hawaii for nurses and para-professionals.

Kokua Nurses & Kokua HOME HEALTH AGENCY

Specialists in Private Duty Nursing,
Hospital and Office Staffing.

Licensed and Certified for
Medicare/Medicaid Reimbursement

RN'S • LPN'S • Nurses Aides
Medical Assistants
Travel Nurses • X-Ray &
Medical Technicians • Physical
& Occupational Therapists
Medical Social Workers
RN Supervision • Speech
Pathologists

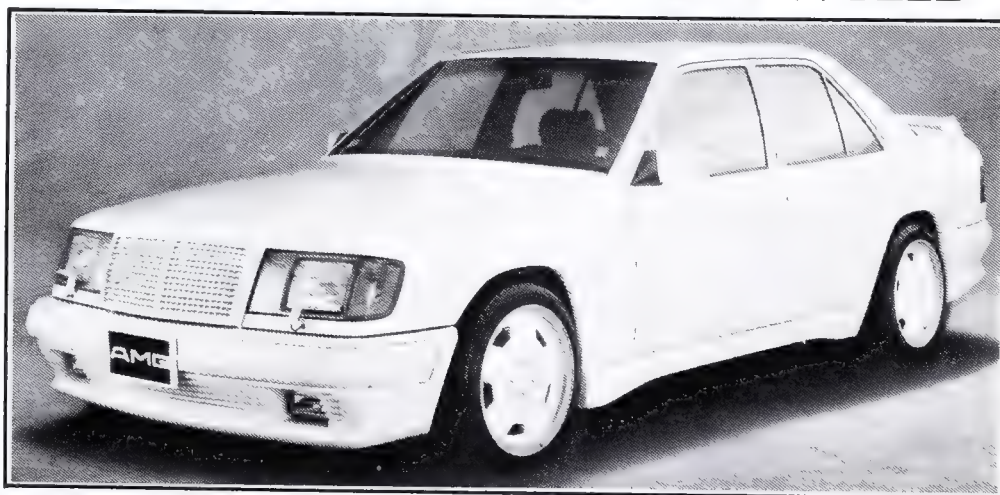


Kokua Nurses

ON CALL 24 HOURS 536-2326
1210 Auahi Street

APPLICANTS WELCOME

HAMMER HITS HAWAII



The AMG Hammer; a machine of heroic capabilities . . . designed to reward the discriminating driver who claims the horizon as personal property.

No other practical four-passenger car can provide you the AMG Hammer's unprecedented performance. Its abilities go beyond wishes into what most can only consider dreams: 0 to 60 in 5.0 seconds; the quarter mile in 13.5 seconds at 107 mph; the fastest 30-to-50 and 50-to-70 times ever recorded by Car and Driver; and a top speed of 186 mph. At Magnum Motorsport, we can customize almost any car, including VW, Honda, Toyota, Datsun and Mazda.

Call for FREE brochure and more information.

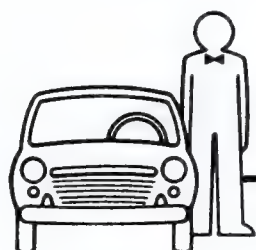
AMG

777 Kapiolani Blvd. 537-3975

MAGNUM
MOTORSPORT
INTERNATIONAL MOTORING ACCESSORIES

"I don't have time to drop off my car for service — CarKeepers does. I never leave my office."

**Discover the
Complete Maintenance Program . . .**



CARKEEPERS

**the general practitioner for your car
533-1356**

STAT!

When you need to get the call :

**Rx Panasonic
EB-362**

\$1489.00

Complete with

- Battery Charger
- Travel Charger
- Free Pick Up & Delivery
- Group Discounts



IN TOUCH
Communications

395-4433

"LOW-TECH" TREATMENT TREND IN OBSTETRICS—Many technological breakthroughs have been made in the field of obstetrics, but recent research indicates that traditional or low-tech treatment of obstetrics patients or newborns may sometimes be the preferred course.

At the University of Pennsylvania School of Medicine, Philadelphia, for instance, researchers have found that low-birth-weight infants can safely be discharged from the hospital earlier than was thought, and with a substantial cost-saving.

On average, infants in the study group were discharged 11 days earlier, weighed 200 grams less and were two weeks younger than those in the control group. Nurse-midwives made special home visits, and frequent phone contact with hospital staff was available to the early-discharge families. An average savings of nearly \$20,000 per infant was realized, with no difference between the study group and the control group in re-hospitalizations, acute-care visits, or physical and mental development.

At Johns Hopkins Medical Center, Baltimore, a researcher has found that the low-tech fetal non-stress test is as accurate in determining fetal heart rate during labor as is electronic fetal monitoring. Currently, the electronic method is used more commonly, but the Johns Hopkins study found it to be no more accurate than the less costly and less time-consuming non-stress test. Timothy Johnson, assistant professor in the Department of Gynecology and Obstetrics, says the non-stress test could be of tremendous value in rural areas where electronic fetal monitoring is not always available.

Another example of the trend toward low-tech obstetrical care is the work being done at Chicago's Mount Sinai Hospital Medical Center to safely reduce the number of Caesarian section deliveries. The hospital's 1986 C-section rate was nearly 10% lower than the national average (13.6% compared to 23%) as a result of policies implemented by Dr. Norbert Gleischer, chairman of Mount Sinai's department of obstetrics and gynecology.

MEDICARE BOOSTS OUTPATIENT SURGICAL CARE—Outpatient surgeries performed in hospitals have increased a dramatic 74% between 1983 and 1986, going from about 5 million procedures to nearly 9 million in just three years. For Medicare patients, the numbers are up largely as a result of the prospective payment system (PPS),

established in late 1983. PPS certified 100 outpatient surgical procedures for Medicare coverage, thus providing strong encouragement for their use, since Medicare seldom pays for inpatient surgery when the procedure has outpatient certification.

By this October, there will be even more outpatient care provided under Medicare because the number of certified procedures will double in accord with a provision in the 1987 Budget Reconciliation Law. The legislation mandates phasing in a prospective pricing system (i.e., payment rates would be predetermined) for all outpatient surgical procedures and eliminates the disparity in payment rates between free-standing outpatient surgery centers and hospital outpatient surgery departments over the next few years.

According to Diane Howard, director of AHA's division of ambulatory care, hospital social service personnel and discharge planners will play an increasingly important role in ensuring that Medicare outpatients receive the home care and follow-up medical treatment they require.

LOCAL PROSTATE SCANNER—

Prostate cancer is one of the most common forms of cancer among males over the age of 55 in the United States. During 1986, an estimated 90,000 cases of this disease were diagnosed in the U.S. This year the figure has increased to 96,000 cases.

The Honolulu Medical Group recently announced the addition of a new prostate scanner that assists physicians in evaluating this disease. The scanner detects abnormalities of the prostate gland through the use of ultrasound echoes.

Call Mickey Wittig at 537-2211 for more information.

PUBLIC HEALTH SCHOOL NAMED FIRST WORLD HEALTH ORGANIZATION CENTER—The University of Hawaii's School of Public Health has been named the first of World Health Organization International Collaborating Centers for Health Leadership Development by that organization.

As a collaborating center, the University will develop teaching materials, conduct applied research and train individuals designated to assume leadership positions in the World Health organization's efforts to improve global health and reduce unnecessary maternal and child death. The center, under the direction of Dr. Jerrold M. Michael, dean of the UH

FROM THE MONUMENTS OF THE GOD KINGS. ANGKOR WAT, CAMBODIA.



*Green Stone Head of Deity,
Angkor Wat, Circa 12th Century, A.D.*

Perhaps the most difficult art for the collector or investor to obtain are the relics from the ancient temples of Cambodia.

Treasures of Asia has acquired distinctive antique Khmer pieces and extends an invitation to view the collection. Each particular object is accompanied by a certificate of authenticity.

Please call to ensure we are in the office.

TREASURES OF ASIA INC.,

SUITE 1007 EXECUTIVE CENTRE,
1088 BISHOP STREET,
HONOLULU, HI 96813 • TELEPHONE 537-3202



WE'RE
FIGHTING FOR
YOUR LIFE

**American
Heart
Association**





What Is The State of Your 1987 Taxes?

If you are an Hawaii resident, in 1987 you could pay up to 42.02% in taxes to the state of Hawaii and to the federal Government. (Based on the maximum 1987 federal tax rate of 38.5% and the Hawaii state tax rate as of 10/1/86.) Now is the time to take a close look at the tax advantages of Seligman Tax-Exempt Fund Hawaii Series!

The Series Offers:

- INCOME EXEMPT FROM FEDERAL INCOME TAXES
- INCOME EXEMPT FROM THE PERSONAL INCOME TAX OF HAWAII

It's Time to Choose a Professionally Managed
Double Tax-Exempt Bond Portfolio

INVESTIGATE SELIGMAN TAX-EXEMPT FUND
HAWAII SERIES

EF Hutton

E.F. Hutton & Company Inc.

2500 Pauahi Tower, 1001 Bishop Street
Honolulu, Hawaii 96813
(808) 521-2961

Yes! Send me a prospectus which contains more complete information on Seligman Tax-Exempt Fund Hawaii Series including information about the sales charges and other expenses. I understand that I should read it carefully before I invest.

MAIL THIS COUPON OR CALL 521-2961 TODAY!

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

DAYTIME PHONE _____ HOME PHONE _____

6/87

School of Public Health, will conduct training here and across the globe to develop leadership in primary health care and related fields to help coordinate the battle against health threats such as AIDS, leprosy, infant diarrhea and tuberculosis.

Designation of the University of Hawaii as a collaborating center represents WHO endorsement of the School of Public Health's ability to bring international leaders together to discuss world health concerns, according to UH President Albert J. Simone. Public health officials say they plan to build center activities from a base created by a series of UH Public Health symposia and workshops, including the President's Conference on Health and Human Services, which brought chief executive officers of 10 Asian and Pacific universities here in January at President Simone's invitation.

At the University of Hawaii, the WHO collaborating center will focus on the interaction, at the university level, of experts in health, education, business, transportation and other fields important to health programs.

"We've seen how education relates to control of AIDS, and how transportation affects the delivery of health services," Simone said.

The three other institutions slated for designation as WHO centers for leadership development will focus on different approaches to the collaboration effort. The School of Public Health at Mahidol University in Bangkok, Thailand, for example, will focus on health ministries. The other schools to be named are the School of Public Health at the University of Indonesia in Jakarta, Indonesia, and the Center for Health Cooperation in Brioni, Yugoslavia.

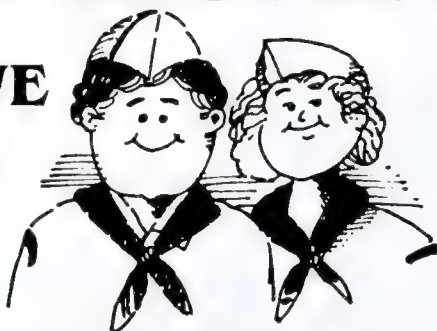
ANXIETY, DEPRESSION, SCHIZOPHRENIA — ARE THEY ALL A QUESTION OF BRAIN CHEMISTRY?—Many scientists now believe that some neurologic and psychiatric illnesses are the result of defects in particular neurotransmitter systems. Most of the drugs used to treat these illnesses either mimic or block the action of the affected systems.

The limbic system (including the pituitary and hypothalamus) is used to feel and regulate emotion, memory and certain aspects of attention. Many believe that some forms of schizophrenia and the affective disorders — depression and its opposite, mania — may be the results of malfunctions in the limbic system.

"The localization of depression has not been worked out, but the pituitary

YOUR MONEY HELPS SCOUTING,

**AND WE
THANK
YOU.**



Aloha United Way



Home Construction Loans: custom-made for you.

We're the people to see if you need a loan of \$100,000 to \$1 million for land purchase and custom home construction.

First Hawaiian Creditcorp understands the complexities of residential construction loans. We assign a personal loan officer who is experienced in construction lending to work with your architect, contractor and you throughout the entire building process.

Our loan rates are among the most competitive in Hawaii. And we pride ourselves on providing fast loan approvals.

At First Hawaiian Creditcorp, we're quick with the paperwork, too. We ensure that loan processing and closings are fast and efficient to avoid inconvenience to you or costly delays in the construction process.

So when you are ready to move ahead with your building plans for new construction or major remodeling, phone First Hawaiian Creditcorp, Inc. at 525-7100. We'll make the financing as comfortable as your new home.

(We also have fixed rate long term take-out financing available.)

**We give you
more loan
for your money.**



First Hawaiian Creditcorp, Inc.

We say yes to you, too.

(A financial services company of First Hawaiian Inc.)

Member FDIC



NO TAXES. HIGH INCOME.

Now you can achieve these investment objectives in one professionally-managed, convenient package—the **Hawaiian Tax-Free Trust**.

Hawaiian Tax-Free Trust is a municipal bond mutual fund that is **locally managed** by Hawaiian Trust Company, Ltd. It is designed especially for residents of Hawaii. By investing primarily in Hawaii tax-free municipal securities, the Trust gives you the advantage of earning a high level of income which is **double tax free***—free of both State and Federal income taxes. Dividends are paid monthly or automatically reinvested.

And these big tax savings can be realized with an **initial investment of only \$1,000**, and no minimum for additional investments.

FOR INFORMATION
Contact Your Local Investment Broker
OR CALL 1-800-228-4227
Toll-Free From Hawaii, 7 days a week, 24 hours a day

Aquila Distributors, Inc., 200 Park Avenue New York, New York 10017



HAWAIIAN TAX-FREE TRUST

You will be sent free descriptive material and a prospectus containing more complete information including management fees and expenses. Read carefully before you invest or send money.

*Under certain circumstances, some income may be subject to state and federal tax. Share price and dividend rate are not fixed and vary with interest rate fluctuations.

©Aquila Management Corporation

We'd like to introduce you to the newest spokesman for the American Heart Association.

Just as soon as he's born.

The same baby who, ten years ago, wouldn't have lived to speak his first word. But now doctors can look inside the hearts of unborn babies, detect disorders and correct them at birth. Thanks to research, he can have a healthy, normal life.



American Heart Association

WE'RE FIGHTING FOR YOUR LIFE

and hypothalamus appear to be the most likely areas," says William Z. Potter, MD, chief of the section on clinical pharmacology at the National Institute of Mental Health, Bethesda, Md.

For example, excessive amounts of the neurotransmitter *dopamine* are thought to exist in the brains of some *schizophrenics*. Thus, most drugs used in the treatment of this disease block dopamine receptors. The main dopamine sites are in the substantia nigra, a structure that separates the midbrain from the cerebral cortex, the midbrain (just above the brainstem) and the hypothalamus. While most believe that the part of the brain disturbed in schizophrenia is the midbrain (where the limbic system is housed), drugs cannot target their action only to limbic receptors. So they hunt out all dopamine sites. All too often, the result is tardive dyskinesia, a movement disorder caused by abnormal dopamine transmission or altered dopamine receptors in the basal ganglia.

If the neurotransmitter is the key, the receptor is the lock. "Receptors are quite important in understanding drug action," says Dr. Joseph J. Schildkraut, professor of psychiatry at Harvard Medical School. "We've known about them for many years, but it has only been in the past decade that we've begun to understand how they function at the biochemical level."

Receptors are more complicated than once thought. Each is made up of components that perform a variety of tasks, from binding the neurotransmitter to modulating its effect. Moreover, some evidence indicates that a receptor can receive messages from more than one type of neurotransmitter.

Consider, for example, the neurotransmitter *norepinephrine*, a chemical involved in exciting the body for immediate action and believed to be linked to *mania* and *depression*. There are four types of norepinephrine receptors at different sites in the body. So it is possible to design drugs that achieve a particular desirable effect by either blocking or stimulating the chemical at one of the four norepinephrine receptors. In the peripheral nervous system, for instance, the stimulation of an alpha-adrenergic receptor raises blood pressure. Thus, many drugs for treating hypertension are designed to block only this receptor.

Another interesting example involves *benzodiazepines*, medications typically used to treat anxiety. A few years ago, researchers discovered that the brain has receptors to which benzodiazepine can attach. Anti-anxiety drugs may work by

clinging to these receptors and enhancing the neurotransmitter gamma-aminobutyric acid, or GABA. The GABA system is thought to have an inhibitory effect, slowing the firing rate of some neurons. Scientists now suspect that the benzodiazepines augment the effect of GABA, helping it to quiet other brain systems and diminish anxiety.

Investigators are now searching for different types of benzodiazepine receptors. If found, their discovery could foster development of new drugs that act upon some but not all receptors. The result might be reduced anxiety without the common side effect of sedation.

LOCAL HOSPITAL PLANS WAI-PAHU SATELLITE—St. Francis Medical Center recently launched the first phase in the development of a new 100-bed acute care satellite hospital in Waipahu, to be called the St. Francis Medical Center-West.

To initiate the development of the hospital campus, American Medical Buildings (AMB) in San Diego was retained to construct a 38,000-square-foot medical office building, providing practice space for medical staff physicians. This is the second building developed by AMB for St. Francis Hospital.

The new medical office building, St. Francis-West Medical Plaza, will be completed approximately two years before the hospital. In an effort to establish a strong presence in the Waipahu community, St. Francis plans to locate a variety of outpatient services in the new building.

Completion of the St. Francis-West Medical Plaza is scheduled for May 1988.

DIMINISHED NIGHTTIME ERECTIONS IN DEPRESSED MEN MAY LEAD TO MISTAKEN DIAGNOSIS OF PHYSICAL IMPOTENCE—Depressed men often complain of blunted sexual interest, reduced energy or impotence. Whether these complaints reflect an underlying physical illness or psychological problem remains unresolved. One possible answer to this question may come from a recent study of nocturnal penile erections in men with sexual complaints.

Healthy men have nightly erections during periods of rapid eye movement (REM) sleep. Diminished nighttime erections in men with organic (biological) impotence have been previously demonstrated. In contrast, men with sexual disorders of a psychological nature gen-

erally have sleep erections of normal size, firmness and duration.

The researchers studied 10 men suffering episodes of major depression and seven control subjects. (Subjects were excluded from both groups if they had a history of sexual problems or medical conditions.) Each patient was monitored for two or three nights in a sleep research laboratory. Electroencephalogram (EEG) readings indicated periods of REM sleep and strain gauges (and other measures) determined the size, firmness and duration of nocturnal erections.

Depressed patients had considerably less penile tumescence (swelling) time than the control group. Three members of the depressed group had a combination of reduced tumescence time, flaccid erections on visual inspection and low buckling force (a measure of firmness). All three reported reduced sexual interest, and two had erectile difficulties when depressed. Follow-up study of these three patients after improvement in their depressive symptoms revealed a parallel recovery in penile buckling force and an improvement in sexual function in all three. Two of these patients had an increase in time of full penile tumescence.

The authors conclude that depressed men with decreased libido who have erec-

PHYSICIANS

*Your Army Reserve Personnel Counselor
would like to talk to you about the following
opportunities in the US Army Medical Department:*

**PART-TIME INCOME
RETIREMENT POTENTIAL
POST EXCHANGE PRIVILEGES
INSURANCE DISCOUNTS**

**CONTINUING MEDICAL EDUCATION
ATTENDANCE AT AMA CONFERENCES
TRAINING AT U.S. ARMY HOSPITALS
ALL PAID FOR BY THE US ARMY RESERVE**

Major Patricia S. Schackleton, MSC



415-751-1616

USAR AMEDD Procurement, ATTN: SGPE-PDR-SF, Bldg 1801, Presidio of San Francisco, CA 94129-1161

*Many groups TALK about building a better America-
The Army Reserve WORKS at it.*

tile difficulties may show false positives on tests for signs of organic impairment. Thus, patients complaining of impotence should be evaluated for signs of depression before any treatment for organic impotence, such as the penile implant, is undertaken. Because antidepressant medications can adversely affect some aspects of tumescence, diagnostic tumescence studies should be carried out when the patient is medication-free.

"Nocturnal Penile Tumescence in Depressed Men," Michael E. Thase, MD, et al., Department of Psychiatry, University of Pittsburgh School of Medicine, American Journal of Psychiatry, 144:1, January 1987, pp. 89-92.

HEAD INJURY AND RESULTING SEIZURE DISORDER MAY TRIGGER MANIA AND VIOLENT BEHAVIOR

—People who have had serious head injuries associated with seizures (approximately 10 million head injuries occur in the United States each year) are at risk for developing posttraumatic mania within three years of the incident, according to a recent report. Posttraumatic mania is caused by a severe blow to the head and is characterized by irritable mood, assaultive behavior, sleeplessness,

delusions of power or fame, hyperactivity, forced or pressured speech, grandiose ideas and hypersexuality.

An association between head injury and mental illness has been suspected since the 16th century. The relationship was confirmed in the early days of neurosurgery when patients developed mania following surgery on the midbrain.

In this study, 20 patients with a documented history of head trauma were recruited from neuropsychiatric outpatient clinics in New York. Three patients had mild head trauma, four moderate and 13 severe. Trauma to the head was caused by either a fall from a height, motor vehicle accident or blow from a moving object.

The study participants were given a psychiatric interview that focused on detecting affective disorders (mania and depression) and schizophrenia. Sixteen of the patients were diagnosed as having bipolar illness (characterized by recurrent episodes of both hyperexcitement and depression). Three patients evidenced some psychotic features with manic or depressive elements superimposed. One patient was termed moderately manic.

The average time between injury and the development of psychiatric symptoms was 2.8 years. Mania occurred 10 times

as often as depression, with 70 percent of the patients having only manic episodes.

All of the patients studied suffered seizures or partial seizures following head trauma. Half were left with persistent seizure disorders — generally temporal lobe epilepsy. This particular form of epilepsy often results in psychological disturbances and violent behavior.

The authors suggest that a seizure disorder occurring after a head injury may be one factor predisposing individuals to a type of bipolar illness in which mania prevails over depression and assaultive behavior is common.

"Mania Following Head Trauma," Sashi Shukla, MD, et al., Department of Psychiatry, School of Medicine, State University of New York at Stony Brook Health Sciences Center, New York, American Journal of Psychiatry, 144:1, January 1987, pp. 93-96.

LIFELONG NIGHTMARE SUFFERERS MORE VULNERABLE TO PSYCHOTIC EPISODES BUT MORE LIKELY TO BE ARTISTIC—Individuals who suffer frequent nightmares throughout their lives tend to have more schizophrenic personality traits than people who have only vivid dreams or night



Once upon a time, this was considered a luxury.

If you're a busy executive, cellular phone service from Hawaiian Tel is no longer a luxury. It's a necessity.

Cellular is the most important communications breakthrough since the advent of the telephone itself. It allows you to conduct business from almost anywhere. So your productivity is increased. And your down-time is eliminated.

Besides the obvious business advantages, cellular service from Hawaiian Tel is backed by 104 years of local knowledge, and the nationwide cellular expertise of GTE Mobilnet.

terrors, according to a report in the Archives of General Psychiatry. Nightmares are long, frightening dreams that occur late in the night during extended rapid eye movement (REM) sleep. Night terrors, or sudden arousals, are often associated with a single frightening image or no dream at all and usually occur in an earlier stage of sleep.

The authors suggest that nightmares may be a transition between dreaming and psychosis (loss of contact with reality). And they report that in this study, all individuals with frequent nightmares were found to have had psychotic episodes. Interestingly, a majority of those who had nightmares also had careers or creative interests in the arts.

The researchers studied three groups of 12 subjects each. The nightmare group consisted of individuals who reported having at least one nightmare per week throughout their lives. The first control group was comprised of persons who reported having vivid dreams but no nightmares. The other control group consisted of people who had neither vivid dreams or nightmares. Each subject underwent psychiatric interviews that covered nightmare or dream experiences, childhood and family history. Following



O.P.T.I.O.N. Care of Hawaii
A Home IV and Nutritional Service

QUALITY, COMMUNICATION AND EXCELLENCE IN INTRAVENOUS HOME CARE...

Our clinical Pharmacists and Registered Nurses are dedicated to quality patient care, timely communication and excellence in home I.V. Therapies.

O.P.T.I.O.N. Care® is a sound, cost-effective and rewarding alternative, offering your patients an option in health care they may not have considered possible.

...WE'RE COMMITTED TO IT

For More Information **CALL 254-5841**

Pali Palms Plaza • 970 N. Kalaheo Ave., Suite C-106 • Kailua, Hawaii 96734



So was this.

For more information on cellular service from Hawaiian Tel, dial 732-9500. Because, if your company calls for effective communication, you're the cellular type.

HAWAIIAN TEL **GTE**
Beyond the call



An authorized agent of
Mobilnet®
Cellular Communications



a series of standard psychiatric ratings and tests, a formal psychiatric diagnosis was provided where appropriate.

The most common theme among the nightmare subjects was being chased by a large man, gang or group of frightening people. Five of the 12 reported dreaming they were actually shot or stabbed in these episodes. For all 12, no single real external event could be connected with any of the nightmare themes. On occasion, subjects with nightmares could not be sure they were not still dreaming once

CLASSIFIED NOTICES

To place a Classified Notice, call Lellani at 521-0021.
4 line minimum, approx. 5 words per line.
Payment must accompany order.

EMPLOYMENT OPPORTUNITIES

WANTED

General Internist for multi-specialty group on Maui. Position avail. immed. Contact D.S. Gilbert, MD, 130 Prison St. Lahaina, HI. 96761. Ph. (808)-661-0051.

Family Physician Wanted

Board certified to join a growing primary care oriented multi-specialty medical group on Kauai. To help staff the newest of three offices (Koloa). Call Dr. Eric Yee 742-1677 (W); 338-1923 (H).

MEDICAL DIRECTOR for Waikiki health center. Prefer board certified, in family practice or internal medicine. Contact Margaret 922-4787.

BUSINESS OPPORTUNITIES

Neurosurgeon Board

Certified with current Hawaii license. Special interest in pediatrics & spinal disorders. Interested in establishing practice either solo or group. Interested parties write: Department #350

c/o Pacific Business News
P.O. Box 833
Honolulu, Hawaii 96808

OFFICES

Tenanted income-property for sale. Commcl. use. Near Ward/Town covd.-prkg. Space for owner-user. \$250 K. 67-yr. lease. Craig Chang (RA). Locations Inc, 735-4200.

Has parking been a problem for you and your clients? Call us today! We have the office space for you with ample free parking. Bobbie Martinsen (R) 521-0321 HAWAII MANAGEMENT CORP.

SERVICES

Jumbo Residential Loans

\$200,000 to \$5 Million. No income taxes required. Easy qualifying. Call 944-0903.

they awoke, suggesting a problem distinguishing reality from fantasy.

Half of the members of the nightmare group were diagnosed as suffering from either schizophrenia, schizotypal personality disorder (a personality disorder in which oddities of thought, perception, speech and behavior are not severe enough to meet the criteria for schizophrenia) or borderline personality disorder (marked by impulsive and unpredictable behavior). The remaining six subjects in this group described occasional feelings of paranoia, loss of identity and mystical experience. None of the members of the two control groups (vivid dreamers and non-dreamers) was diagnosed as having any schizophrenic-type traits.

Eight members of the nightmare group were employed in the arts or artistically inclined. The authors described them as "open, vulnerable, defenseless and artistic." In general, these individuals had less stable occupations and personal relationships compared with the two control groups.

"Who Has Nightmares? The Personality of the Lifelong Nightmare Sufferer," Ernest Hartmann, MD, et al., Sleep Research Laboratory, Tufts Uni-

versity School of Medicine, Boston, Archives of General Psychiatry, 44, January 1987, pp. 49-56.

EYE PHYSICIANS ISSUE GUIDELINES FOR NATIONAL EYE PLAN—

The largest association of eye physicians and surgeons has issued a plan for the future of eye care, in an effort to confront major changes affecting health care throughout the U.S.

"Eye Care for the American People," issued by the American Academy of Ophthalmology, assesses the current state of vision care services, and sets forth recommendations for establishing an integrated eye care system devoted to providing the "best possible vision for every American."

The report notes that government and provider efforts to cut the cost of care have led not only to fragmentation of services and uneven quality, but have also restricted access and affordability of eye care services.

The 101-page document was developed over a period of three years by a committee headed by Bradley R. Straatsma, MD, professor and chairman of ophthalmology at Jules Stein Eye Institute, University of California, Los Angeles.

Council Capers

Recently, a dear, longtime friend and AMA past president, Donovan Ward, visited Maui. I confided in him that I found it hard, at times, to reflect on the sometimes sensitive material discussed at the Council meetings. His advice to me was, "Denis, you've just got to tell it, like it is." So here goes . . .

On Friday, May 23, 1987, officials from MIEC met with over 100 members of the Hawaii Medical Association and interested members of the State Legislature at the Mabel Smyth Auditorium at noon.

As you know, MIEC representatives bore bad news of the big increase in premiums for our malpractice insurance amounting to 37% on top of a 25% stepwise increase of our premiums. Total increase anticipated is over 70% over our present rates.

Now, why such a big increase? Currently, there are about 11 claims per month, accounting for approximately

\$26,000 per claim, which is much higher than California's experience. The real culprit for the increase is the lack of a meaningful "tort reform" package. California passed a meaningful tort reform law in 1975 and the malpractice premiums have since been reasonable.

Passed at the Council meeting were:

- Support of MIEC's premium increase request to Hawaii's insurance commissioner.

- Independent hiring of an insurance adjuster to study the premium increase.

The HMA's new building near Keau-moku and Beretania is fast coming up. Almost three of the four stories of the building are being finished.

Tip of the month: In an earlier issue, I recommended the apple turnover from Napoleon's Bakery. Now you just got to try their cream-filled Long Johns.

Denis J. Fu, MD
Maui Councillor

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo) 329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**



It's always there when you need it.

Whether you're putting the kids through school, paying medical bills, starting a family, or planning a vacation, you can always count on First Hawaiian's Equity FirstLine of Credit.SM

Whenever you need FirstLine, all you have to do is write a check. And since it's secured against your equity in real estate, FirstLine's interest rate is a lot lower than ordinary personal loans. Plus,

there are no points to pay. And few, if any, closing costs.

For more information, just visit any branch of First Hawaiian Bank. Like FirstLine of Credit, we're always here when you need us.



FIRST HAWAIIAN BANK
We say yes to you.

Member FDIC



*Annual percentage yield for most first-line loans is 10.99% to 14.99% depending on credit score. Most closing costs are also waived on FirstLine secured by fee simple or leasehold properties.

SEPTEMBER 1987
VOL. 46, NO. 9

Hawaii MEDICAL JOURNAL

CONTENTS

FROM THE DIRECTOR OF HEALTH 330

John C. Lewin, MD

FROM THE PRESIDENT 332

Walter W.Y. Chang, MD

EDITORIAL: 333

LOGIC VERSUS TRADITION

J.I. Frederick Reppun, MD

CHARLES S. JUDD JR., MD 336

1920-1987

J.I. Frederick Reppun, MD

HEREDITARY ANEMIAS IN HAWAII 337

Y.E. Hsia, BM, FRCP, DCH

J.A. Hardman, MD

R.T.S. Jim, MD

W.R. Wilkinson, MD

W. McKinney, MD

E. Alvarez—Pacpaco, MD

CLINICAL TESTS OF MALE FERTILITY STATUS 347

Douglas W. Soderdahl, MD, FACS

NEWS & NOTES 352

Henry Yokoyama, MD

OVER THE EDITOR'S DESK 361

Stephen R.P.K. Brady, MD

Hawaii Medical Journal
UCSF LIBRARY
Received on: 11-26-87



UCSF LIBRARY
SERIALS DEPT
257 MED SCIENCES BLDG
SAN FRAN, CA 94143-0840

131st Annual Scientific Meeting
October 9 - 11, 1987
Kauai Hilton and Beach Villas
Lihue, Hawaii
Plan now to attend!



CAN YOU AFFORD TO SURVIVE AN ACCIDENT?

If a serious accident or illness left you disabled, life could be a lot tougher than you think.

Because even after your medical insurance takes care of your hospital and doctors' bills, you're still left with the bills you've always had. Without the salary you've always had.

That's why it helps to know someone with MONY, The Mutual Life Insurance Company of New York.

At MONY, we can offer you significant disability insurance protection, tai-

lored to your needs and lifestyle. If you should become totally disabled, it would help replace your lost income.

And, unlike traditional disability plans, MONY can provide partial or residual benefits after you return to work, if your earnings are reduced by 20% or more.

Your MONY representative can also offer you an option that adjusts your benefit upward as the cost of living rises.

So call today about our disability

programs. Because it's good to know you'll always have an income you can count on. Even if you're faced with something you didn't count on.

In Hawaii, it's smart to know someone with . . .

MONY
FINANCIAL SERVICES

**Please call Vicki Williams
536-6977**

The Mutual Life Insurance Company of New York

New York, New York 10019

Pacific Headquarters, Pacific Tower, Suite 2800, 1001 Bishop Street • Honolulu, HI 96813

HAWAII MEDICAL JOURNAL

(USPS 237-640)

Published Monthly for the
HAWAII MEDICAL ASSOCIATION
(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD

Founding Editor: HARRY L. ARNOLD JR., MD

News Editor: HENRY N. YOKOYAMA, MD

Assistant Editor and Book Review Editor:

DOUGLAS G. MASSEY, MD

Contributing Editors: STEPHEN R.P.K. BRADY, MD,

FRANCIS H. FUKUNAGA, MD,

Managing Editor: CHARLOTTE BEAL

Editorial Assistants: BECKY KENDRO,

JUDI KINGREY

Copy Editor: GWENDOLYN CHANG HULLEMAN

Graphic Artist: J. CHARLES DAVIS

Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,

THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,

JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD

(Commissioner)

HENRY N. YOKOYAMA, MD

(Chairman)

STEPHEN R.P.K. BRADY, MD,

NATHANIEL P.H. CHING, MD,

FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,

JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,

JAMES P. MCGUIRE, MD,

DAMKERNG PATHOMVANICH, MD,

ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,

J.I. FREDERICK REPPUN, MD,

TERRY C.Y. WONG, MD,

SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD

President-Elect: JAMES LUMENG, MD

Past President: RUSSELL T. STODD, MD

Secretary: JOHN H.C. KIM, MD

Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD

Honolulu: JOHN T. McDONNELL, MD

Kauai: THOMAS GROLLMAN, MD

Maui: HELEN S. PERCY, MD

West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD

CALVIN C.M. KAM, MD

Alternate Delegates to AMA

WALTER W.Y. CHANG, MD

RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.

Post Office Box 833

Honolulu, Hawaii 96808

Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.

16 Bruce Park Avenue

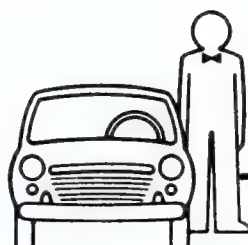
Greenwich, Connecticut 06830

Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.

"I don't have time to drop off my car for service — CarKeepers does. I never leave my office."

Discover the
Complete Maintenance Program . . .



CARKEEPERS

the general practitioner for your car
533-1356

STAT!

When you need to get the call :

Rx



MOTOROLA 990

\$2295.00

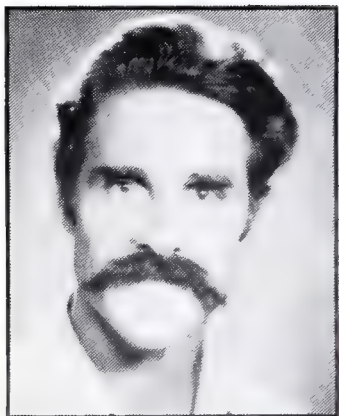
Complete with

- Battery Charger
- Leather Case
- Extra-Battery
- Travel Charger
- Free Pick Up & Delivery
- Group Discounts



IN TOUCH
Communications
395-4433

Authorized Agent.
GTE Mobilnet®
Cellular Communications



FROM THE DIRECTOR OF HEALTH

Leptospirosis in Hawaii

In July, three children were hospitalized and two others became ill after swimming in Waimea River on Kauai. Three out of the five have been confirmed by the Centers for Disease in Atlanta, Ga., as having leptospirosis and two cultures are still pending.

Leptospirosis is one of those infectious disease entities that we physicians see each month listed on the Department of Health's communicable disease report. However, many physicians have confided to me that they have pretty much forgotten about the clinical and scientific aspects of prevention, diagnosis and treatment of this disease. Therefore, I felt this brief review might be of assistance.

Leptospirosis, sometimes called the "great imitator," may resemble a wide variety of diseases, and may be mistaken for influenza and other viral diseases. Common characteristics of the disease in Hawaii are a febrile illness of sudden onset, severe headache, with continued fever, prostration, severe myalgia and conjunctival suffusion.

In severe cases, hemorrhage and jaundice may appear. Clinical recognition is based on knowledge of the varied presentations of the disease, a high "index of suspicion" and a knowledge of local epidemiological probabilities.

Recent serological surveys indicate that the infection is much more prevalent than most physicians recognize. Positive antibody rates among those living in rural areas may be over 10%, and among high-risk occupational groups (e.g., taro farming) it may be as high as 60%. Since the Department of Health began collecting statistics in the early 1970s, Hawaii has had the highest incidence of leptospirosis in the U.S.

Human infections primarily result from direct and indirect exposure to the urine of infected animals. The leptospira from urine can enter the body through breaks in the skin, including even small scratches, and through the lining of the mouth, nose and eyes. They can also penetrate skin that has been immersed in water for a long time. Thus, persons who come into regular contact with wet environments that may be contaminated with the urine of animals are at a high risk of infection.

In Hawaii, high-risk occupational groups presently include those who work in taro fields and in fish and prawn freshwater ponds. Persons involved in the raising of dryland crops such as sugar cane, vegetables and various grains may also become infected, since they may have considerable contact with urine-contaminated soil and plants. Pet animals, particularly dogs, are another common source of infection; they are frequently infected and may serve as carriers without obvious signs of disease.

Various recreational activities may also present risks of infection. Numerous isolated cases and epidemics have been associated with swimming in freshwater ponds and streams. Fish-

ing in fresh water, boating, hunting and hiking in wet areas are further examples of leisure activities that have been linked to leptospiral infections.

Leptospirosis in Hawaii was historically considered an occupationally acquired disease primarily affecting sugar laborers and taro farmers. The first death from leptospirosis — then known as "infectious jaundice" — was reported to the Territorial Department of Health in 1907. Diagnosis of the early cases was based on clinical symptoms and autopsy findings only and lacked laboratory confirmation.

In 1936 the causative organism was demonstrated from a human case by Hawaii's Dr. Joseph Alicata, and the disease was made reportable by the Department of Health. During the next 50 years (through 1986), 579 cases have been reported in Hawaii.

Department of Health records indicate that workers in the sugar industry accounted for a majority of the total number of cases of leptospirosis reported prior to 1950. However, extensive rodent-control activities by the industry and by the Department of Health, increased mechanization in processing the cane, the wearing of protective clothing and the burning of cane fields prior to harvesting have all aided in reducing the incidence of the disease in sugar workers to a very low level today.

Concurrently, there has been an increase in the proportion of cases associated with agricultural industries other than sugar, including freshwater aquaculture, and the proportion of cases exposed during avocational pursuits has also increased in recent years. These trends indicate a need to educate those at high risk of acquiring the disease, including farmers who work in wet, rodent-infested environments, hunters, hikers, freshwater fishermen, animal owners and others who may come into contact with infected animals and their excreta.

Preventive measures include: (1) Avoiding swimming or wading in fresh water with open cuts or wounds; (2) wearing protective clothing (e.g., gloves, boots, long-sleeved shirts and pants) when clearing shrubs or grass, working in moist soil, or dressing or cleaning livestock or game animals; (3) boiling or treating stream water before drinking; (4) controlling rats, mice and mongooses around the home and the workplace, and (5) eliminating potentially contaminated areas of standing water around the home. Although vaccines have been developed to prevent the disease in dogs, an effective vaccine has not been developed for use in preventing the disease in man.

It is impossible to eliminate the animal reservoirs of infection. Therefore, the disease is likely to continue to be a significant cause of morbidity in Hawaii for years to come. Nevertheless, early recognition of the disease may help to prevent mortality, and the clinician is in an excellent position to inform patients of preventive measures.



Most business deals boil down to financial muscle.

You either have it or you don't.

The advantage comes from a tough business sense, as well as a strong banker with clout.

At First Interstate, you've got both. A financial expert whose analytical skills and sound judgement can create the winning edge in any business deal, a strategic partner who works with you from the start to develop solutions and opportunities to keep your profit picture rosy.

Adding strength to muscle, you also have the support of the nation's largest

multi-state banking system with over \$52 billion in assets.

With these extensive resources, First Interstate offers local businesses a wide range of services all under one roof. From innovative financing techniques to advanced cash management products. From exceptional customer service to specialized industry expertise.

Let's talk about what a strong financial network can do for your business future. Call First Interstate at 525-6820 today.



First Interstate Bank

Member FDIC



FROM THE PRESIDENT

Hawaii's Health Risks and Concerns

The State Department of Health's Summer 1987 "Health Messenger" dealt with interesting facts regarding health risks and concerns for Hawaii.

In 1986, the DOH's Health Promotion and Education Department surveyed by telephone more than 1,550 people over 18 years of age. This survey was conducted under the Behavioral Risk Factor Surveillance Program, and results were compared to results obtained in 25 other states.

Seatbelt usage showed about 92% statewide compliance, however, Maui, Hawaii and Kauai showed only 85% compliance.

Other behavioral risk factors included:

Sedentary Lifestyle: 40%	Hypertension: 16%
Smoking: 25%	Chronic Drinking: 12%
Drinking Binges: 20%	Drinking and Driving: 3%
Obesity: 17%	

The above figures are the percentages of those interviewed who were at risk or had the above risk factors.

Interviewees also reported a combination of risk factors:

- Cigarette smoking, drinking and driving
- Inadequate seatbelt use, drinking and driving
- Sedentary lifestyle and drinking
- Hypertension and obesity

In the survey, interviewees indicated that personal physicians were the most important source of medical information. Personal health concerns dealt with eating habits, chronic conditions, self image and stress. Public health concerns were related to chemical pollution, health care costs, drug and alcohol abuse and violent crime.

We physicians have an important, unique, and ultimately rewarding leadership responsibility to take in assisting our patients in achieving a healthier and happier lifestyle.

Walter W.Y. Chang, MD

President

Hawaii Medical Association

**WOULD
YOU GO
TO YOUR
DOCTOR
FOR
LEGAL
ADVICE?**

GUARANTEED FASTEST PROCESSING AND LOWEST AVAILABLE RATES.

- In-home or office consultation
- Processing of all applications and filings
- Arrangements for appraisal, escrow & other necessary legal matters
- Consultations with your accountants, attorneys or trust officers, if necessary
- Loan officers on call seven days a week

*Let us
Fill in the blanks*

RESIDENTIAL LOAN APPLICATION:

Borrower's Name		Address		City		State		Zip	
Occupation		Annual Income		Monthly Income		Monthly Expenses		Monthly Payment	
Type of Loan		Term		Interest Rate		Points		Fees	
Property Description		Appraisal Date		Appraiser's Name		Appraiser's License No.		Appraiser's Signature	
Lender's Name		Lender's Address		Lender's City		Lender's State		Lender's Zip	
Lender's Phone		Lender's Fax		Lender's Email		Lender's Website		Lender's Signature	

The Professionals in Real Estate Financing:

Residential Real Estate
Commercial Real Estate
Jumbo Loans
Conventional Financing
FHA/VA Financing
Second Mortgages



**PHOENIX
FINANCIAL
SERVICES**

1088 Bishop Street
Suite 1215
Honolulu, Hawaii 96813
PH: 538-0088



Logic Versus Tradition

Pediatricians, urologists and family physicians who still deliver babies and care for newborns, all would appreciate reading pages 1545-47 in the NEJM issue of June 11, 1987, Vol. 316 No. 24, under *Correspondence*: The relationship between circumcision and AIDS.

Probably never before has the human foreskin received such extensive coverage (no pun intended!).

Some 40 years ago, as a plantation physician, we questioned the logic of circumcising newborn boys almost as soon as they got their first spanking. Not only did "logic" point the finger of shame at the doctor who thought he could improve on nature, but also for doing so before the infant had had a chance to recover from the trauma of the birthing, or before reaching a stage of homeostasis.

It has taken nearly 40 years for the society of "healers" to come around to thinking logically that circumcision is not medically necessary, and if it really is, to do it on day 10, or later, rather than on day one. The infant's pain from the surgery is probably no less intense, since the procedure is not done under anaesthesia, whether done on either day.

We'll never forget the case of a newborn (during internship in the early 1940s), whose circumcision kept on bleeding until the little exasperating non-complier had to be strapped by all four

limbs and flat on his back in a crib, his little penile appendage swathed in a doughnut of bandages and adhesive tape, with no clothes on that might rub on it or get wet. His only remonstrances were limited to two: To bawl continuously, and to pee straight up into a hapless doctor's peering eye!

Forty years ago, we plantation docs also were confronted with newly arrived immigrant celibate workers who felt it necessary, on arrival by the boatload, to meld into our "civilized" society by getting circumscised (and by getting their normal, vermiform appendices removed) — the Purple Heart complex post-World War II, perhaps!

In both instances — newborn circumcision and adult circumcision (the latter usually self-initiated crudely and requiring the physician to complete the job) — it was societal pressure on the doctor that prevailed. The traditional mores prevailed over the logic that should have been the guide.

Those were the days, ah yes, but for remarkable reading about an old and even ancient ritual fraught with religious and tribal overtones and now again to the fore (pun intended), when a little bit of extra skin may be the open sesame to AIDS, read the NEJM!

J.I. Frederick Reppun, MD
Editor

PHYSICIANS

***Your Army Reserve Personnel Counselor
would like to talk to you about the following
opportunities in the US Army Medical Department:***

**PART-TIME INCOME
RETIREMENT POTENTIAL
POST EXCHANGE PRIVILEGES
INSURANCE DISCOUNTS**

**CONTINUING MEDICAL EDUCATION
ATTENDANCE AT AMA CONFERENCES
TRAINING AT U.S. ARMY HOSPITALS
ALL PAID FOR BY THE US ARMY RESERVE**

Major Patricia S. Schackleton, MSC



415-751-1616

USAR AMEDD Procurement, ATTN: SGPE-PDR-SF, Bldg 1801, Presidio of San Francisco, CA 94129-1161

***Many groups TALK about building a better America-
The Army Reserve WORKS at it.***

***“I can alert
40 salespeople with
one phone call.”***

That's efficient. That's TeleMessenger, from Hawaiian Tel. Call 545-1800 and learn what else TeleMessenger can do for you.

***“Keeping
our service personnel
on schedule
would be impossible
without TeleMessenger.”***

That's productive. That's TeleMessenger, from Hawaiian Tel. Call 545-1800 and learn what else TeleMessenger can do for you.

***“When I have an
important message for
our mainland offices,
it doesn't matter if the
Boston branch
has closed for the night.”***

That's beating the time zone problem. That's TeleMessenger, from Hawaiian Tel. Call 545-1800 and learn what else TeleMessenger can do for you.

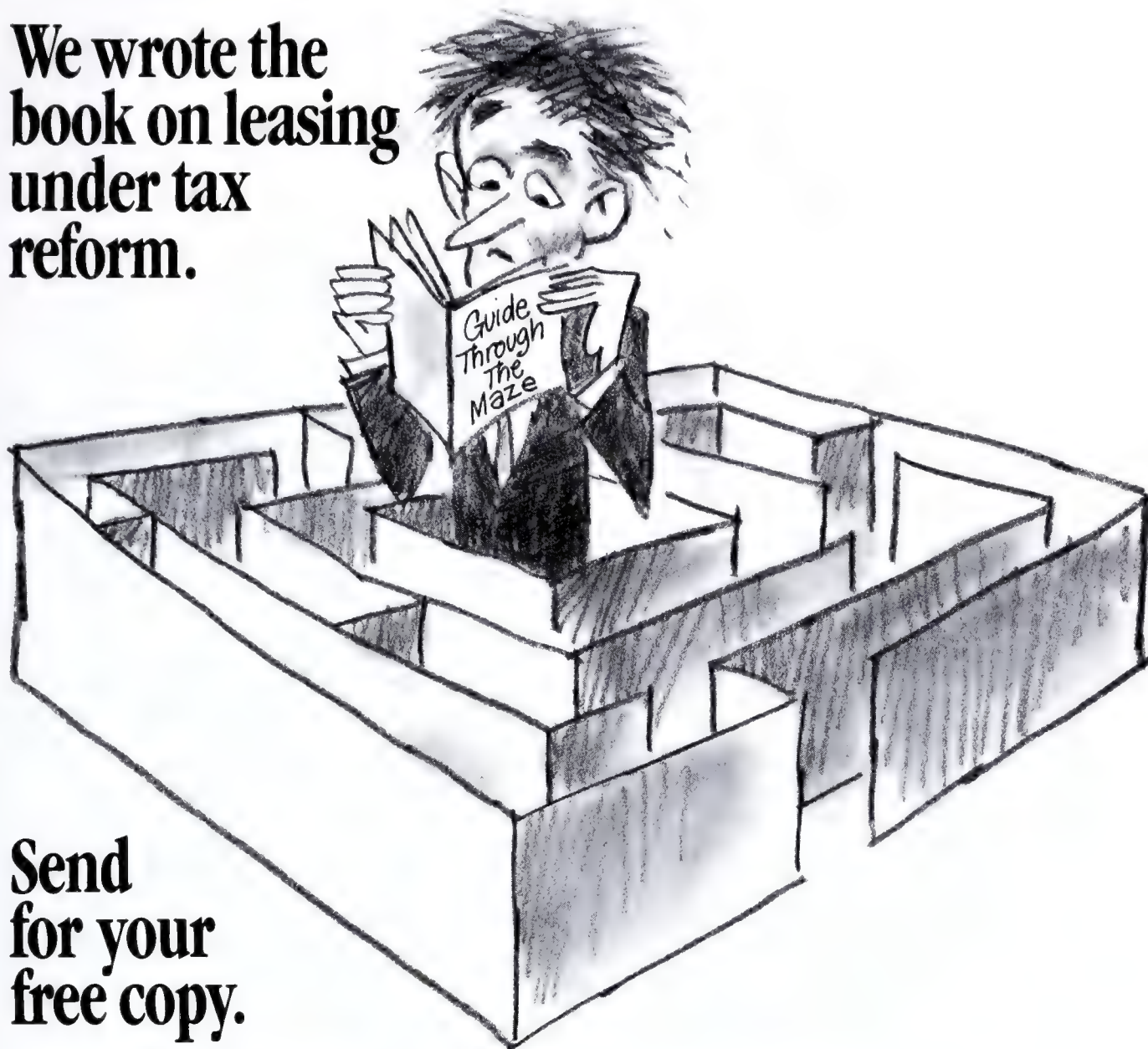
***“I used TeleMessenger
to send the
information that closed
the sale—
while I was away on
vacation.”***

That's good business. That's TeleMessenger, from Hawaiian Tel. Call 545-1800 and learn what else TeleMessenger can do for you.

HAWAIIAN TEL GTE
SPECIALIZED COMMUNICATIONS DIVISION

Beyond the call

**We wrote the
book on leasing
under tax
reform.**



**Send
for your
free copy.**

Does leasing make sense after tax reform?

For some companies, it not only makes sense, it could become imperative.

But leasing can be an arduous journey through a maze full of pitfalls for the inexperienced.

The booklet, "Leasing and Tax Reform: a Guide through the Maze," can help. It's a refreshing 32 pages of plain talk about this complex subject.

It's by the (very experienced) leader in leasing—in Hawaii and across the United States—the \$26 billion General Electric Credit Corporation.

And it's free.

Use the attached card to send for your personal copy today, while supplies last.

GECC HAWAII LEASING

a division of:



**GECC
Financial
CORPORATION**

700 Bishop Street, 9th floor Phone: 527-8333

Charles S. Judd Jr., MD 1920-1987

On the 23rd of July 1987 this community's very much beloved and highly respected surgeon and physician, Charlie Judd, died after a brief illness — acute myelogenous leukemia — at The Queen's Medical Center. All of modern medicine's sophisticated therapeutics was to no avail. His wife of over 30 years, Mary, was at his bedside throughout a long vigil.

Funeral services took place at Central Union Church at 5 o'clock in the afternoon of Wednesday, the 29th of July, interment having been a private family ceremony in the preceding week.

The church was filled to overflowing; close to a thousand people came to show their respect and affection, and from all walks of life, a spectrum of the ethnic polyglot that is modern Hawaii and silent testimony to Charlie's healing touch generously given to one and all. An emigre, a German-born mechanic, was there because "Dr. Charlie saved my life by operating on me."

There were many Samoan families present because Charlie spent three years in Western Samoa as a "missionary surgeon" who not only did necessary surgical operations in the absence of such available service, but taught his art and gave freely of his medical and surgical knowledge to those in that isolated, newly independent community who were eager to learn. A Samoan Delegation eulogized him at the service and presented Mary with finely woven mats, only the second such official presentation to a foreigner since the one to Robert Louis Stevenson 150 years ago.

Members of the Hawaii Medical Association were notable for their presence; Charlie had always been active in putting his shoulders to the wheel of progress and service to humanity epitomized by organized medicine.

The people of Kalihi were present in large numbers; Charlie had founded a free clinic there when he saw the need.

Dress varied from work clothes to aloha attire to formal black coat and tie. Most striking of all, however, was the obvious presence scattered throughout the multitude, of the members, young and old, of the generations descended from the Christian missionaries who came to the Sandwich Islands 150 or so years ago, members of the same Potestant Faith upon which Central Union Church was founded, and to which the Judds gave lavish support.

The church edifice itself, in its airy whiteness inside yet allowing the cool breezes of Manoa to enter freely through its open sides, as well as the visual appearance of the lush green foliage outside, bathing the senses; the feelings of peace and quiet; the contemplation of humanity in the presence of its highest and noblest aspirations to God, was a proper and fitting place in which to honor the memory of Charlie.

We could not help but dwell, at this time, in these surroundings, on the pervading thought that Charlie, a scion of those congregational missionaries from New England who braved unknown dangers to come to Hawaii to do good; that our Charlie had emulated them in their, and his own, very best intentions to live a life of "doing good."

Dr. Charlie loved Hawaii and all its people, old and new. He loved the world and all its people, too; he was an active member of PSR, the physician organization dedicated to trying to prevent a nuclear war.

We will remember Charlie as a physician after the model of Hippocrates and Aesculapius, a physician who was concerned with all of man's many ills, of the spirit as well as of the flesh. His life has shown us "the way."

—J.I. Frederick Reppun, MD
Editor

Hereditary Anemias in Hawaii

Y.E. Hsia, BM, FRCP, DCH*

J.A. Hardman, MD**

R.T.S. Jim, MD***

W.R. Wilkinson, MD****

W. McKinney, MD****

E. Alvarez-Pacpaco, MD†

The differential diagnosis of microcytic anemias in Hawaii presents special problems because of the hereditary anemias prevalent in its large Asian subpopulations¹⁻⁶. Both the alpha- and beta-thalassemias are important causes of morbidity and mortality¹⁻⁶. Heterozygous carriers for either type mimic iron-deficiency, which may lead to inappropriate work-up or treatment.

The thalassemias and hemoglobin (Hb) variants are all benign in heterozygotes, but if a couple are both heterozygous for the same or for incompatible variants, their children have 25% risk of inheriting a serious anemia. These can be prevented by detecting the heterozygotes¹⁰⁻¹², and by offering genetic counseling and fetal testing¹³⁻¹⁴ to couples at risk of having severely affected children.

Early detection is also possible by the screening of newborns^{2, 3, 8, 15}. Fetal diagnosis, or early detection and treatment,

can greatly reduce the consequences of these anemias. Screening and prevention will cost far less than the cost of care for affected patients.

Homozygous alpha₁-thalassemia, Hb Barts hemoglobinopathy, is the commonest cause of lethal hydrops fetalis in Hawaii (Tables 1, 2); it also produces grave maternal obstetric complications. Nakayama et al.¹⁶ reviewed the largest number of cases in the United States and outlined simple strategies for detecting it. Mothers with affected fetuses always have placentomegaly and premature labor; they have polyhydramnios or oligohydramnios, hypertension, abruptio placentae and even heart failure. The fetus develops extreme hydrops and dies in utero or soon after birth.

Part One The Problem in General

The Rationale of Thalassemia Screening. Heterozygotes are detectable by simple screening tests⁵⁻¹². Diagnoses can often be confirmed by test findings in key relatives, but many cases require more complex investigation.

The Strategy. Screening for both alpha- and beta-thalassemias (Figure 1, Tables II, III) can be based on red cell resistance to osmotic fragility in hypotonic glycerol¹², or on microcytic red cell indices (CBC) and abnormal morphology⁵⁻¹⁰. Most heterozygotes have low mean corpuscular volume (MCV < 80) and mean corpuscular hemoglobin (MCH < 23 pg) (Table IV). The reticulocyte count is normal in the mild heterozygotes, but will be raised in the more severe thalassemia syndromes. It is not needed in screening for the thalassemias.

Accepted for Publication, June 1987

*Medical Genetic Services,
Departments of Genetics and Pediatrics

**Department of Pathology

***Department of Medicine

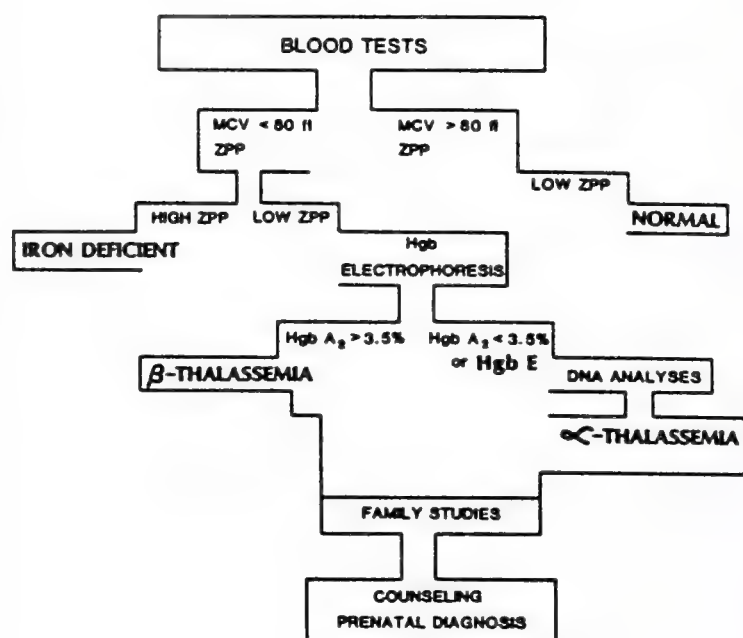
****Department of Pediatrics

†Department of Obstetrics,
John A. Burns School of Medicine,
University of Hawaii

Supported by Department of Social Services & Housing Grant MCJ-153562 for Special Projects of Regional and National Significance.

FIGURE 1

SCREENING FOR THE THALASSEMIAS



Juliet Yuen
Medical Genetic Services

TABLE II

Common Asian Alpha-Thalassemia Genes:

Normal: ($\alpha\alpha$)
 Single Deletion Chromosomes:
 ($-\alpha$)
 Hb Q: ($-\alpha^Q$)
 Hb Constant
 Spring ($\alpha\alpha^{CS}$)

Double Deletion Chromosomes:
 ($--$)

Some Alpha Thalassemia Gene Combinations:

Alpha-Thalassemia Deletions: *
 Single Gene Deletion Equivalents:
 ($-\alpha/\alpha\alpha$)
 ($-\alpha^Q/\alpha\alpha$)
 ($\alpha\alpha/\alpha\alpha^{CS}$)

Double Gene Deletion Equivalents:
 ($--/\alpha\alpha$)
 ($-\alpha/-\alpha$)
 ($-\alpha/-\alpha^Q$)
 ($-\alpha/\alpha\alpha^{CS}$)

Triple Gene Deletion Equivalents,
 producing Hemoglobin H Disease:
 ($--/-\alpha$)
 ($--/-\alpha^Q$)
 ($--/\alpha\alpha^{CS}$)
 ($\alpha\alpha^{CS}/\alpha\alpha^{CS}$)

Quadruple Gene Deletion, Hydrops fetalis
 or Bart's Hemoglobinopathy:
 ($--/--$)

* Any of these can be associated with any
 beta-thalassemia variant.

TABLE I

The Normal Hemoglobin Proteins

Embryonic:	Hb	Gower I	zeta ₂ /epsilon ₂
	Hb	Gower II	alpha ₂ /epsilon ₂
	Hb	Portland	zeta ₂ /gamma ₂
Fetal:	Hb	F	alpha ₂ /gamma ₂
Adult:	Hb	A	alpha ₂ /beta ₂
	Hb	A ₂	alpha ₂ /delta ₂
	Hb	A _{1c}	glycosylated Hb A

Common Abnormal Asian Hemoglobin Proteins

Hb	Barts	gamma ₄
Hb	H	beta ₄
Hb	E	alpha ₂ /beta ₂ ^E
Hb	Constant	
	Spring	alpha ^{CS} ₂ /beta ₂

BUY vs. LEASE? LET THE BUYER BEWARE.



Beware the hidden costs when investing in new capital equipment.

Buying ties up your cash and your hands. Subjects your company to inflation and risk. And leaves you open to paying too much for your new equipment.

Commercial Leasing avoids the penalties of buying.

Leasing conserves capital and improves your cash flow. In a lease, you need little or no down payment. A lease provides 100% financing, which can include delivery, installation, taxes and progress payments. You keep your cash for working capital, investments, expansion or other vital uses. Nor, must you raise new capital

to obtain needed equipment.

Leasing is a hedge against inflation and risk. You pay for today's equipment with tomorrow's cheaper dollars. Also leasing protects you from the risk of obsolescence. You're never stuck with inefficient, outdated equipment. Or paying for it!

Leasing brings down the cost of equipment. Bancorp Leasing

rental payments are often significantly less than standard loan payments. And, now, with 1986 tax reform eliminating the investment tax credit, changing depreciation rules, and the new Alternative Minimum Tax, leasing may lower the tax bite. Further, you may be able to expense the entire amount of your payments for tax purposes, reducing your tax liability more.

You need the use of equipment now, not ownership in the future. Learn the actual dollar savings of leasing vs. buying from the experts in the largest equipment leasing company

in Hawaii. Allied with Hawaii's largest bank, Bank of Hawaii. (So if a Bank of Hawaii loan is better or cheaper, we'll tell you that, too.) You have nothing to lose and everything to gain. Call 537-8812. No obligation. Avoid the pitfalls of investing in capital equipment. You can with Bancorp Leasing.



Bh Bancorp Leasing of Hawaii

A subsidiary of Bancorp Hawaii



**The best doctors get sued.
We protect you.
We know how.**

Let us tell you how we do it.



Medical Insurance Exchange of California
Professional Liability Exclusively

6250 Claremont Avenue, Oakland, California 94618-1324

Call MIEC's Honolulu Claims Office, 545-7231, or call toll-free 800-227-4527

Iron deficiency is unlikely unless the red cell distribution width (RDW), a measure of anisocytosis, is over 15%^{17, 18} (Table IV). The beta-thalassemia majors, Hb H diseases and some alpha₁-thalassemia heterozygotes, have enough anisocytosis to raise the RDW, but it is normal in most heterozygotes. The red cell zinc proto-porphyrin (ZPP), or "free" erythrocyte protoporphyrin (FEP), measureable by simple hemato-fluorometry, is raised in iron deficiency or lead poisoning¹⁸, but not in the thalassemias^{19, 20}.

Suspected iron deficiency can be confirmed by low serum ferritin (< 10 mcg/dl), which is cheaper than doing serum iron and iron-binding capacity, or can be diagnosed by therapeutic response to oral iron, which will raise the hematocrit in two to four weeks in iron-deficiency cases.

Confirmation by Hemoglobin Electrophoresis. Hb electrophoresis on cellulose acetate or starch gel at pH 8.6 will separate most normal and variant Hb proteins by characteristic Hb migration rates. The low levels of Hb A₂ can only be measured accurately by column chromatography. Citrate agar electrophoresis at pH 6.5 separates Hb F and Hb C better. Rarer variants mimicking common ones can be misdiagnosed if not tested further; unstable variants may be missed if tests are delayed^{8, 21}.

• Normal Adults versus Infants.

A normal adult has mainly Hb A, with < 3.5% Hb A₂ and < 1% Hb F (Table IV). At birth, normal-term infants have nearly 50% Hb F and barely any Hb A₂; in the first four months, Hb F falls and Hb A₂ rises to the normal adult ranges²²⁻²⁴.

Hb E Homozygotes and Heterozygotes. The most common beta variant in Asians is Hb E (Table III), which co-migrates with Hb A₂ or Hb C on electrophoresis²⁵⁻²⁸. Hb C is common in West Africans, but is not seen in Orientals^{7, 8}.

Hb E or beta^E homozygosity is benign, with a moderate micro-cytic anemia (Table IV). Electrophoresis shows Hb E, some Hb F, but no Hb A at all (any Hb A₂ is obscured by the Hb E). Both parents of a person with beta^E homozygosity must be beta^E heterozygotes, children of a homozygote all must inherit the beta^E trait.

Beta^E heterozygosity causes mild microcytic anemia. Hb electrophoresis shows 20% to 40% Hb E co-migrating with Hb A₂ (this should not be confused with Hb A₂, which only exceeds 15% in beta-thalassemia major)²⁹; Hb A is 60% to 80%. Concomitant alpha-thalassemia in a person will lower the Hb E to 15% to 20%.

The Beta^{thal} Thalassemias, Beta^o and Beta⁺.

• Homozygotes: Beta Thalassemias Major and Intermedia.

Homozygotes for a severe beta^o thalassemia can make no Hb A at all, only Hb F and Hb A₂ (Table III). An affected infant will become severely anemic in a few months as Hb F declines; marked hepatosplenomegaly and erythroid hyperplasia will develop unless aggressive treatment with transfusions keep the hematocrit above 30%^{7, 8}.

The chelating agent *desferrioximine* will counteract the ill-effects of iron accumulation^{8, 30, 31}. Supplements of folate, ascorbate, and B vitamins might help these patients, the use of prophylactic penicillin as for sickle cell disease^{32, 33} is not known.

Milder beta⁺-thalassemia homozygotes make a little Hb A, but may still be transfusion-dependent. The thalassemia inter-medias cause a less severe chronic anemia not needing transfusions.

Rare gene deletion delta/beta thalassemias also lack delta genes, and produce no Hb A₂. Delta/beta gene fusions produce a Hb *Lepore* (alpha₂/lepore₂) instead of Hb A and Hb A₂.

TABLE III

Hb E and Beta-Thalassemia Minor Variants: *

Normal Genotype:	Beta ^A /Beta ^A
Hb E Heterozygote:	Beta ^A /Beta ^E
Hb E Homozygote:	Beta ^E /Beta ^E
Beta ⁺ -Thal-Heterozygote:	Beta ^A /Beta ⁺
Beta ^o -Thal-Heterozygote:	Beta ^A /Beta ^o

Beta-Thalassemia Intermedia or Major Syndromes: *

Beta-Thal Intermedia:	Beta ⁺ /Beta ⁺
Hb E/Beta-Thal:	Beta ^E /Beta ⁺
Hb E/Beta-Thal:	Beta ^E /Beta ^o
Beta-Thal-Major:	Beta ⁺ /Beta ^o
Beta-Thal-Major:	Beta ^o /Beta ^o

* Any of these can be associated with any alpha-thalassemia variant.

Homozygotes have a thalassemia intermedia. On elec-trophoresis, Hb Lepore co-migrates with beta, rarer variants migrate elsewhere. Heterozygotes are asymptomatic with very low levels of Hb Lepore.^{7, 8}

• Heterozygotes: Beta-Thalassemia Minor.

The one normal beta gene in beta^{thal} heterozygotes produces enough Hb A to prevent symptoms, but such cases have a mild microcytic anemia with slightly dysmorphic red cells from birth. After early infancy, heterozygotes for most beta^{thal} variants have 3.5% to 10% A₂ and 2% to 5% Hb F, more in some variants (Table IV)^{7, 8}.

• Compound Heterozygotes, Beta^E/Beta^{thal}.

A person inheriting beta^E from one parent and a beta^{thal} from the other makes no normal beta-globin and reduced amounts of Hb E, resulting in a syndrome equivalent to thalassemia major or intermedia. In Southeast Asia, beta^E/beta^{thal} is far more prevalent than a homozygous beta^{thal}, because beta^E is so com-mon. Transfusions are best avoided if possible; some patients might be kept stable with supplemental folate and B vitamins, good nutrition and prompt treatment of intercurrent illnesses^{7, 8}. Hereditary Persistence of Hemoglobin F (HPFH). Homozygotes for these entirely benign HPFH variants never switch from gamma-globin to beta-globin production, continuing to produce Hb F throughout life. On electrophoresis, homozygotes have only Hb F; heterozygotes have nearly as much Hb F as Hb A.

• The Alpha Thalassemias. Alpha₁ Thalassemia Homozygotes and Heterozygotes.

Alpha₁ (---) thalassemia homozygotes lack all of the four normal alpha genes (αα/αα) on chromosome 16³⁶ (Table III). Affected fetuses can make no Hb F or Hb A, and develop erythroblastosis *hydrops fetalis*. Electrophoresis shows only the unstable fast Hb Barts, Hb H, embryonic Hb Gower I and Hb Portland. Both parents of an affected fetus must be at least alpha₁(---/αα) thalassemia heterozygotes.

Alpha₁ (--/ $\alpha\alpha$) -thalassemia heterozygotes inherit a double alpha gene deletion (--) from one parent, a normal pair of alpha genes ($\alpha\alpha$) from the other, and have a benign mild microcytic anemia. At birth, heterozygotes have 2% to 5% Hb H and Hb Barts on electrophoresis; after a few months, the only abnormality on routine Hb electrophoresis is marginally low Hb A₂.^{7, 8}

• Alpha₂ Thalassemia homozygotes and Heterozygotes.

Alpha₂ (- α / α) -thalassemia homozygotes have one normal alpha gene (- α) on each chromosome 16. The effect is a mild microcytic anemia, virtually identical to alpha₁ (--/ $\alpha\alpha$) heterozygosity; newborn infants have 2% to 5% Hb H and Hb Barts. Alpha₂-thalassemia heterozygotes (- α / $\alpha\alpha$), missing only one alpha gene, have hematologic findings overlapping well into the normal range, but traces of Hb H and Hb Barts are seen at birth (Table IV) and their Hb A₂ is normal.^{7, 8}

Hemoglobin H Disease. Compound heterozygotes for alpha₁ and alpha₂ (--/ α) inherit a double deletion (--) from one parent and a single deletion (- α) from the other. Affected infants have a microcytic anemia with 20% to 25% Hb H and some Hb Barts.

Affected patients have a thalassemia intermedia syndrome of variable severity; pregnancy may aggravate the anemia. Electrophoresis of fresh samples shows 5% to 20% Hb H. (The

unstable Hb H is easily missed, as it migrates very rapidly and can run off the electrophoretic strip.) Hb A₂ is low, 1.5% to 2.5%.

Excess Hb H precipitates as red cell inclusion bodies, detectable by supravital staining. The rare association of Hb H disease with mental retardation is due to a huge DNA deletion on chromosome 16, which extends far beyond the alpha genes.^{7, 8}

Hemoglobin Constant Spring. In some Asian populations, over 3% have the Constant Spring (α^{CS}) alpha variant^{28, 37, 38}. This mutant alpha gene also impairs the synthesis-capability of its neighboring alpha gene. ($\alpha^{CS}\alpha$ / $\alpha^{CS}\alpha$) homozygotes and (--/ $\alpha^{CS}\alpha$) compound heterozygotes have the equivalent of Hb H disease. On electrophoresis, Hb CS is present in very low amounts, and migrates slowly, near carbonic anhydrase. Heterozygotes are difficult to detect, as Hb CS is hard to spot.^{7, 8}

Other Non-Deletion Alpha-Thalassemias. Some other alpha gene variants synthesize alpha-globin at low efficiency levels, mimicking a single (- α) or double (--) deletion. Hb Q, which is always associated with a single alpha gene (- α^Q), is indistinguishable from Hb S on electrophoresis.^{7, 8}

Alpha Thalassemia Genes and Beta Globin Variants. Criteria for recognizing the mild alpha-thalassemia traits are obscured in beta variants, such as a beta^{Thal} or beta^E ²⁹, where an alpha-

TABLE IV

Range of Red Cell Indices (2 s.d. above & below Mean).
Preliminary Data from Hawaii Thalassemia Project

Diagnosis	[N]	Hb	MCV	MCH	RDW	A ₂	ZPP
Normal Subjects	401	10.8 - 16.7	78.9 - 97.8	26.1 - 34.0	10.5 - 15.6	0.8 - 3.4	6.0 - 30.1
Beta-Thalassemia Heterozygotes	46	8.8 - 13.9	55.3 - 77.6	17.6 - 25.6	13.0 - 18.0	3.6 - 6.7	7.0 - 48.3
Sickle Cell or Hb Q Heterozygotes	5	10.9 - 14.9	77.0 - 89.0	25.8 - 29.6	12.9 - 14.8	3.5 - 3.7	11.7 - 16.0
Hb E Heterozygotes	147	9.7 - 15.6	67.6 - 84.7	22.0 - 28.6	10.0 - 17.8	16.4 - 45.0	5.0 - 35.9
Hb E Heterozygotes and Single Alpha Gene Deletion (- α / $\alpha\alpha$)	6	10.0 - 15.9	65.0 - 90.0	21.4 - 31.0	11.8 - 16.0	20.2 - 41.4	7.3 - 30.3
Hb E Homozygotes	19	10.0 - 14.2	57.3 - 72.5	18.3 - 23.5	14.1 - 17.1	94.6 - 99.0	7.3 - 40.9
Alpha ₂ -Thalassemia Phenotype	64	10.2 - 15.1	68.8 - 89.6	22.5 - 30.4	11.0 - 16.1	1.8 - 3.1	5.9 - 33.9
Alpha ₁ -Thalassemia Phenotype	93	9.9 - 14.6	61.1 - 74.1	19.5 - 24.1	11.2 - 18.8	1.3 - 3.0	2.6 - 40.9
Hb H Disease (—/ α)	9	8.1 - 12.0	50.5 - 68.0	11.3 - 29.1	12.3 - 27.5	0.7 - 2.4	
Iron Deficiency	10	7.6 - 14.5	63.0 - 86.5	20.1 - 28.9	13.4 - 19.9	1.5 - 3.0	24.3 - 59.5
Iron Deficiency and Alpha-Thalassemia Phenotype	10	7.0 - 12.3	48.2 - 72.2	15.2 - 23.3	12.7 - 23.3	1.0 - 3.1	5.0 - 95.5

thalassemia heterozygosity may remain unsuspected. The β^{thal} , β^{S} or β^{E} variants all tend to be milder in patients who happen also to have deleted alpha genes, because the alpha- and beta-globin polypeptide levels are less out of balance^{7, 8}.

Iron Deficiency. With progressive iron deficiency, red cell ZPP and then RDW rise, Hb, hematocrit, MCV and MCH fall. These help to distinguish iron deficiency from a thalassemia trait. Several formulae have been proposed to discriminate between a thalassemia trait and iron deficiency³⁹⁻⁴⁴. None reliably differentiates the single or double alpha gene deletions, although some are up to 90% accurate for beta-thalassemia heterozygotes⁴⁵.

Since iron deficiency and thalassemia heterozygosity both cause microcytosis, iron deficiency in thalassemia heterozygotes can only be diagnosed by tests such as ZPP or serum ferritin. Similarly, iron deficiency may mask a thalassemia, so possible heterozygotes should be retested after a course of iron treatment. If a patient ever had normocytosis, however, thalassemia heterozygosity is very unlikely. Hb A₂ is lowered by iron deficiency, invalidating identification of the thalassemia heterozygotes based on Hb A₂ levels.

Iron Toxicity. Thalassemic homozygotes and heterozygotes absorb iron more avidly than do normals; long-term iron accumulation may eventually produce hemosiderosis^{7, 8}. Chelation therapy, therefore, must accompany the repeated transfusions these patients need^{30, 31}.

Newborn Screening. Newborn screening for the alpha-thalassemias is worthwhile²⁻⁶ because the presence and the amount of Hb H and Hb Barts reflect the number of functional alpha genes^{7, 8, 15, 23}. In the β^{thal} variants, Hb A₂ does not become elevated until age 4 months²², but in the newborn, Hb A:Hb F ratio is depressed¹⁵. The number of deleted alpha genes correlate with increasing amounts of Hb Bart's in fresh cord blood. Parents and relatives of detected infants should be tested to confirm the diagnoses in families, and to provide genetic counseling for couples at risk.

Confirmation by Family Studies. Correct diagnoses may not be possible without doing family studies. The CBC ranges for the different types of thalassemia overlap one another and the normal. Hb electrophoresis cannot resolve some of these dilemmas, so diagnoses in isolated individuals may be missed or be in error. The inherited nature of these traits often allows for clarification as a result of studies done on relatives. For example:

1—If a child with severe anemia has only Hb E on electrophoresis, he must have $\beta^{\text{thal}}/\beta^{\text{E}}$ and not homozygous β^{E} , if only one of his parents has β^{E} , while the other is heterozygous for β^{thal} .

2—If both parents of a child with Hb H disease seem to be missing two alpha genes, one parent must have $(-\alpha/-\alpha)$ and the other $(-/\alpha\alpha)$; further family studies may reveal which parent has which.

Confirmation by DNA Studies. Modern DNA techniques are powerful tools for detecting gene alterations in the hereditary anemias^{8, 9, 13, 14}. As DNA technologies become simplified, they will be increasingly practical for clinical use and population screening⁴⁶⁻⁴⁸. Single $(-\alpha/\alpha\alpha)$ deletions are detectable, suspected double alpha deletions can be defined as being $(--/\alpha\alpha)$ or $(-\alpha/-\alpha)$, but standard DNA analyses may still miss non-deletion alpha-thalassemias such as Hb CS.

Human DNA can be extracted from leukocytes, amniocytes or any other nucleated cells. The globin genes can be analyzed by probing with a labeled alpha or zeta gene, or in a particular DNA segment after the genomic DNA has been digested with appropriate restriction endonucleases^{8, 9}.

• Technical Problems in DNA Analyses.

Although simple in concept, the procedures demand meticulous technical skills. Subtle band-size differences may be hard to spot; inaccurate digests or plasmid contaminants may produce spurious bands. Polymorphic variants can obscure some variants. Alpha and zeta gene triplication occur in Southeast Asia, as do zeta gene deletions^{37, 49}. Non-deletion alpha variants such as Hb CS may escape detection.

Ante-Natal Screening and Fetal Diagnosis. All pregnant Southeast Asian women with non-iron deficient microcytosis should have their husbands tested for microcytosis^{11, 16}. Family histories, and screening of relatives, may help to identify pregnancies at risk for inherited anemias. Obstetric ultrasound can detect placentomegaly and the other manifestations of fetal hydrops in mid-trimester.

Because DNA can be analyzed from any nucleated cell, fetal diagnosis can be done on amniotic or chorionic villi cells.

Part Two: The Hawaii Hereditary Anemia Project

Medical Genetic Services (MGS) had conducted a pilot study on newborn and family screening⁵⁰ and now has a federal grant to screen the ethnic populations in Hawaii for hereditary anemias. The diagrammed strategies (Figure 1) are being applied in order to screen families and couples at risk for serious anemias. Genetic counseling and fetal diagnoses are being offered to participants^{45, 50, 51}.

All participants are briefed on the thalassemias and are offered free tests for CBC and red cell ZPP. Specimens with microcytosis or dysmorphic red cells are subjected to Hb electrophoresis. Blood is also taken for DNA analysis; a laboratory has been started here to look for deleted and non-deleted alpha variants.

The Lao population in Hawaii was screened first, as it is known to have exceptionally high frequency for these anemias. The study, however, also includes the Filipino and the Southern Chinese, which are also at risk for these traits. Special language brochures and ethnic interpreters have helped to recruit, educate, and counsel those people whose primary language is not English.

The project goals are to: (1) develop better criteria for diagnosing the hereditary anemias; (2) establish a DNA laboratory in Hawaii for clinical diagnoses; (3) determine gene frequencies to predict prevalences for these anemias wherever these populations appear; (4) offer genetic counseling and fetal testing for couples at-risk. The study is also being extended to include the G6PD deficiencies. Funding is being sought for a pilot trial of newborn screening for the thalassemias, in order to develop more simple, reliable and less costly mass-screening techniques than are currently being used.

Preliminary Results

So far, over 900 subjects have been tested, including 500 Lao-tians, 100 Chinese and 200 Filipinos. Alpha gene DNA has been analyzed in over 50 subjects. Fetal diagnoses have been offered to eight couples at risk via Dr. H. Kazazian's laboratory at Johns Hopkins University. Hb E was found in 160, apparent Hb S in 5, probable alpha-thalassemia in 120, beta-thalassemia in 50. Table IV presents the preliminary CBC ranges (from 2 s.d. below, to 2 s.d. above the mean) in selected diagnostic categories, demonstrating the high overlap among these groups^{45, 46}.

Coordination with Local Physicians

Medical community support is critical for the successful operation of this screening project. Knowledgeable physicians can help to ensure that families and pregnancies at risk are recognized and should be referred for testing. Prompt results with accurate interpretations and beneficial genetic counseling should lead to the referral of more patients to this study.

Summary

The hereditary anemias have a high prevalence among the Southern Chinese, the Filipinos and the Laotians who reside in Hawaii. Although heterozygotes are asymptomatic, if both parents are heterozygous, the children of that union may well develop serious inherited anemias.

Heterozygotes can be detected if one has an index of suspicion and scrutinizes routine complete blood counts for microcytosis. Parents at risk then can be evaluated further by a thorough study of all the available relatives in a family. However, specific confirmation is difficult unless DNA analysis can be done.

The federally funded Thalassemia Screening Project in Hawaii is set up to determine the true incidence of these anemias among these Southeast Asian subpopulations. Essential to the accuracy of the findings is the setting up of a DNA analysis laboratory to differentiate between the alpha-thalassemia variants. This is because the red cell indices show a great deal of overlap and because the Hb electrophoresis data may not be specific enough to be diagnostic. The project is attempting to refine these diagnostic criteria.

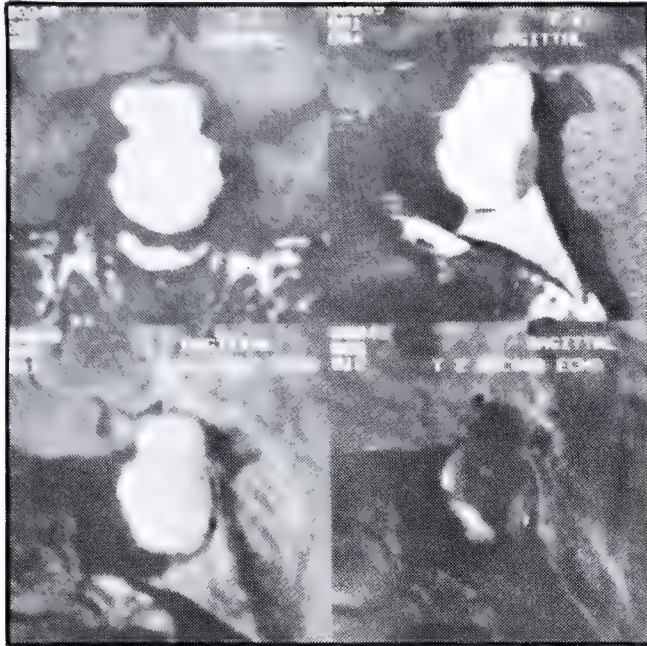
Those couples are then definitely at risk can be given genetic counseling. For a pregnancy at risk, fetal DNA analysis can be offered.

REFERENCES

1. Department of Planning and Economic Development, State of Hawaii: State of Hawaii Data Book. Honolulu 1986.
2. Crocker AC (ed): Thalassemia in Southeast Asian Refugees: Report of a Conference. Irvine, Calif., 1984.
3. Monzon CM, Fairbanks VF, Burgert EO: Genetic hematologic disorders among Southeast Asian refugees and the impact on prevalence of thalassemia-related disorders in the United States. *Clin Res*: 30:795a, 1982.
4. Freedman SI, Bhagavan NV: Hemoglobinopathy screening in Hawaii. *Am J Clin Path*: 64:277, 1975.
5. Jim RTS: Red cell count and hemoglobin level in health student nurses of Oriental extraction in Hawaii. *Hawaii Med J*: 40:329, 1981.
6. Flynn M, Reppun TS, Bhagavan NV: Limitation of red cell distribution width (RDW) in evaluation of microcytosis. *Am J Clin Path*: 85:445-449, 1986.
7. Schwartz E (ed): Hemoglobinopathies in Children. PSG Publishing, Littleton, Mass, 1980.
8. Bunn HF, Forget BG: Hemoglobin: Molecular, Genetic and Clinical Aspects. Saunders, Philadelphia, 1986.
9. Spritz RA, Forget BG: The thalassemias: molecular mechanisms of human genetic disease. *Am J Hum Genet*: 35:333-361, 1983.
10. Pearson HA, O'Brien RT, McIntosh S: Screening for thalassemia trait by electronic measurement of mean corpuscular volume. *N Eng J Med*: 288:351-355, 1973.
11. Stein J, Berg C, Jones JA, Detter JC: A screening protocol for a prenatal population at risk for inherited hemoglobin disorders: results of its application to a group of Southeast Asians and Blacks. *Am J Obstet Gynecol*: 150:333-341, 1984.
12. Gottfried EL, Robinson NA: Glycerol lysis time as a screening test for erythrocyte disorders. *J Lab Clin Med*: 83:323-333, 1974.
13. Antonarakis SE, Phillips JA, Kazazian HH: Genetic diseases: diagnosis by restriction endonuclease analysis. *J Pediatr*: 100:845-856.
14. Kazazian HH, Phillips JA, Boehm CD, Vik TA, Mahoney MJ, Ritchey AK: Prenatal diagnosis of beta-thalassemias by amniocentesis: linkage analysis using multiple polymorphic restriction endonuclease sites. *Blood*: 56:926-930, 1980.
15. Cossu G, Manca M, Pirastu G, Bullita R, Bosio AB, Gianazza E, Righetti PG: Neonatal screening of beta-thalassemias by thin layer isoelectric focusing. *Am J Hematol* 13:149-157, 1982.
16. Nakayama R, Yamada D, Steinmiller V, Hsia E, Hale RW: Hydrops fetalis secondary to Bart's hemoglobinopathy. *Obstet Gynecol*: 67:176-180, 1986.
17. Fukunaga FH: Red-cell distribution width. *Hawaii Med J*: 45:96, 100, 1986.
18. Shifman RB: Red cell ZP: an alternative to serum ferritin determinations for assessing iron depletion. *Clin Chem*: 28:1626, 1983.
19. Koenig HM, Lightsey AL, Schanberger JE: The micromerit of free erythrocyte protoporphyrin as a means of differentiating alpha thalassemia trait from iron deficiency anemia. *J Pediatr*: 86:539-541, 1975.
20. Stockman JA, Weiner LS, Sinor GE, et al: The measurement of free erythrocyte porphyrin (FEP) as a simple means of distinguishing iron deficiency from beta-thalassemia trait in subjects with microcytosis. *J Lab Clin Med*: 85:113-119, 1975.
21. McKusick VA: Medelian Inheritance in Man. Ed 7, J Hopkins U Press, Baltimore, 1986.
22. Galanello R, Melis MA, Ruggieri R, Cao A: Prospective study of red blood cell indices, hemoglobin A2 and hemoglobin F in infants heterozygous for beta-thalassemia. *J Pediatr*: 99:105-108, 1981.
23. Meloni T, Solinas L, Erre S, Dore A, Gallisai D, Porqueddu F: The unreliability of mean corpuscular volume and mean cellular hemoglobin determinations in the diagnosis of alpha-thalassemia in newborn infants. *Europ J Pediatr*: 135:165-167, 1980.
24. Metaxotou-Mavromati AD, Antonopoulou HK, Laskari SS, Tsiata HK, Ladis VA, Kattamis CA: Developmental changes in hemoglobin F levels during the first two years of life in normal and heterozygous beta-thalassemia infants. *Pediatr*: 69:734-738, 1982.
25. Cunningham TC: Hemoglobin E In Indochinese refugees. *West J Med*: 137:186-190, 1982.
26. Fortner A, Taetle R, Ranney H, et al: Clinical and laboratory manifestations of the hemoglobin E syndromes. *Blood*: 58:53a, 1981.
27. Marsh WL, Rogers ZR, Nelson DP, Vedvick TS: Hematologic findings in Southeast Asian immigrants with particular reference to hemoglobin E. *Ann Clin Lab Sci*: 13:299-306, 1983.
28. Sicard D, Lierzou Y, Lapoumerouille C, et al: High genetic polymorphisms of hemoglobin disorders in Laos. *Hum Genet*: 50: 327-336, 1979.
29. Wasi P, Sookanek N, Pootrakul S, et al: Haemoglobin E and alpha-thalassemia. *Brit Med J*: 4:29-32, 1967.
30. Weatherall DJ, Pippard MJ, Callender ST: Editorial perspective: iron loading in thalassemia - five years with the pump. *N Eng J Med*: 308:456-457, 1983.
31. Marcus RE, Davies SC, Bantock HM, Underwood SR, Walton S, Huehns ER: Desferrioxamine to improve cardiac function in iron-overloaded patients with thalassaemia major. *Lancet*: 1:392-393, 1984.
32. Gaston H, Verter J, Woods G, et al: Prophylaxis with oral penicillin in children with sickle cell disease. *N Eng J Med*: 314:1593-1599, 1986.
33. Anon: Penicillin prophylaxis for babies with sickle-cell disease. *Lancet*: 2:1432-1433, 1986.
34. Fairbanks VF, Oliveros R, Brandabur JH, Willis RR, Fiester RF: Homozygous hemoglobin E mimics beta-thalassemia minor without anemia or hemolysis: hematologic, functional, and biosynthetic studies of first North American cases. *Am J Hematol*: 8:109-121, 1973.
35. Sturgeon P, Itano EA, Bergren WR: Clinical manifestations of inherited abnormal hemoglobins. II. Interactions of hemoglobin E and thalassemia trait. *Blood*: 10:396-404, 1955.
36. Lehmann H, Carrell RW: Nomenclature of the alpha-thalassaemias. *Lancet* 1:552-553, 1984.
37. Pootrakul P, Winichagdon P, Fucharden S, Pravatmuang P, Pankijagum A, Wasi P: Homozygous haemoglobin Constant Spring: A need for revision of concept. *Human Genet*: 59:250-255, 1981.
38. Qin WB, Ju TL, Yue XL, Yan XL, Qin LY, Zhao JB, Chen CB: Hemoglobin Constant Spring in China. *Hemoglobin*: 9:69-71, 1985.
39. England JM, Fraser PM: Discrimination between iron-deficiency and heterozygous-thalassaemia syndromes in differential diagnosis of microcytosis. *Lancet*: 1:145-148, 1979.
40. Mentzer WC: Differentiation of iron deficiency from thalassemia trait. *Lancet*: 1:882, 19763.
41. Shine I, Lal S: A strategy to detect beta-thalassaemia minor. *Lancet*: 1:692-694, 1977.
42. Srivastava PC, Bevington JM: Iron deficiency and/or thalassaemia trait. *Lancet*: 1:692-694, 1977.
43. Johnson CS, Tegos C, Beutler E: Thalassemia minor: routine erythrocyte measurements and differentiation from iron deficiency. *Amer J Clin Pathol*: 80:31-36, 1983.
44. Bessman JD, Gilmer PK, Gardner FH: Improved classification of anemias by MCV and RDW. *Amer J Clin Pathol*: 80:322-326.
45. Hall J, Hsia YE, Yuen J, Hardman JM: Pitfalls in differential diagnosis of hereditary anemias in Orientals. *Am J Hum Genet*: 39:A64, 1986.
46. Hsia YE, Yuen J: Hereditary anemia screening in the Laotians, Filipinos and Chinese. *Am Public Health Soc Assoc Annual Meeting Abstracts* P. 31, 186.
47. Hsia YE, Wolf B: A DNA primer. In: Avery GA (Ed): *Neonatology*. Ed 3. Lippincott, Philadelphia, 1987.
48. Drlica K: Understanding DNA and Gene Cloning. A Guide for the Curious. J Wiley, New York, 1984.
49. Felice AE, Cleek MP, McKie K, McKie V, Huisman THJ: The rare alpha-thalassemia-1 of blacks is a zeta-alpha thalassemia-1 associated with deletion of all alpha-and zeta-globin genes. *Blood*: 63:1253-1257, 1984.
50. Yuen JWM, Hsia YE: Family screening for the thalassemias in Hawaii. *Am J Hum Genet*: 34:A115, 1982.
51. Yuen J, Hsia YE, Rattanasamay P: Cultural influences on thalassemia screening in a Laotian community. *Am J Hum Genet*: 39:A184, 1986.

MRI CASE OF THE MONTH

PITUITARY TUMOR



These images were produced by MRI Center of the Pacific using their 1.5 Tesla GE Scanner.

Coned down images of the sella turcica.

Clinical History:

37-year-old Caucasian male with panhypopituitarism and bilateral visual field defects. The prolactin level is markedly elevated.

Radiologic Diagnosis:

There is a 3.1 mm by 2.3 mm by 8 mm relatively homogeneous lesion in the sella turcica which extends superiorly, obliterating the suprasellar cistern. The signal characteristics lends some specificity to the MRI examination. This lesion is most likely a craniopharyngioma considering the bright appearance on the T-1 images.



42A Ahui St.
Honolulu, HI 96813
Phone 531-6841
Hours: 8:00-5:00 Monday-Friday

APPLY BY
SEPTEMBER 1, 1987
AND SAVE 20%.

AT LAST.

A cure for
the high cost
of medical
malpractice
coverage.



The Hawaii Association of Physicians for Indemnification (HAPI) offers a doctor owned, tax-deductible malpractice protection plan to qualified physicians and surgeons practicing in the state of Hawaii.

HAPI's Physicians' Indemnity Plan (PIP) can provide you with \$1,000,000 of medical malpractice coverage.

Our 350 physician-members agree that PIP has decreased their annual medical malpractice costs up to 75 percent.

Let us help you with your medical malpractice concerns. Contact us today for more information. It's good to have a choice . . . It's great to make the right one.

Norman J. Slaustas
Administrator, HAPI and PIP
735 Bishop Street, Suite 311
Honolulu, Hawaii 96813
(808) 538-1908

PIP
Physicians' Indemnity Plan
HAPI
Hawaii Association of
Physicians for Indemnification



Clinical Tests of Male Fertility Status

Douglas W. Soderdahl, MD, FACS*

In view of the large number of tests to measure male fertility, of which contribution to the care of the infertile couple may be unclear and the costs of which may be considerable, a critical review of several of these tests is warranted. In this paper the role of the following tests is discussed: Sperm motility, sperm penetration in a variety of media, sperm antibodies, seminal plasma analysis, genital infections and sperm entry into heterologous ova.

Introduction

Pregnancy is the only irrefutable proof of a sperm's capacity to fertilize. However, though maternity is easily determined, paternity can be a matter of controversy. The standard semen analysis is generally used to ascertain the fertility potential of a man. That is, utilizing semen volume, sperm concentration and/or count, motility and morphology, it is possible in probably most cases to arrive at a fairly accurate estimation of an individual's fertilizing capacity.

However, it is important to realize that each of the parameters identified in a standard semen analysis may have an impact upon fertilizing capacity to variable degrees. Several large, classical studies have defined "the norm¹." However, vast experience has demonstrated that the range for "normal" is extremely broad. Early investigative work placed undue emphasis upon sperm concentration and/or count, which is unfortunate.

For example, it is well-known that a sharp decrease in fertilizing capacity occurs in those individuals with sperm concentrations less than 20 million per ml. However, it is reported that as many as 16% of infertile men have sperm concentrations of 10 million per ml or less, and 9% have concentrations between 10 million and 20 million per ml².

More recently, investigators have stressed the importance of both sperm motility and sperm morphology. Either one of these parameters, or both, are now considered to be as important, or possibly more important, than sperm concentration.

Motility of sperm has been postulated to be the most important factor in predicting fertility. A large number of experimental reports deal with various techniques to measure sperm motility and to relate this parameter of sperm function to the biologic quality of the sperm³.

Progression of sperm in various media, particularly human cervical mucus or bovine cervical mucus, adds a new dimension to the evaluation of fertilizing capacity. Obviously, this meas-

urement likewise gives critical information regarding the transport of sperm through the cervical and uterotubal junction and for penetration of the cumulus and zona pellucida of the ovum.

Nobody seriously doubts today that immunologic factors play a role in human fertility. Most attention concerning the subject has been directed to circulating antisperm antibodies. There has been little discussion to date of antisperm antibodies within seminal plasma itself, or indeed, upon the spermatozoal membrane. Systematic immunologic analysis of seminal plasma and of sperm surface antibodies is not usually a part of the evaluation of infertile males.

Further, the activity of the sperm depends upon the optimal biochemical and steroidal concentrations within prostatic and vesicular fluid. However, at the present time, there is no clear consensus as to the usefulness of in-depth analysis of seminal plasma.

The relationship of symptomatic and asymptomatic genital infections to sperm subfertility or infertility also remains to be explored.

Finally, it is apparent that assessing directly the ability of human sperm to fertilize the human egg could give extremely helpful information. However, owing to obvious practical and ethical limitations, this assay is not likely to become a widespread clinical tool. The development of the hamster egg assay seems to be a feasible alternative in order to obtain this information concerning the final pathway of the fertilization process. Hamster eggs, without a zona pellucida, present no barriers to fertilization by capacitated sperm from virtually any mammalian species.

It is clear that a critical review of new methods for the evaluation of male infertility must focus on important developments in the evaluation of sperm motility, sperm penetration into media, sperm antibodies, seminal plasma analysis, genital infections and sperm penetration into heterologous ova.

Sperm Motility

Approximately 1 in 1,000 sperm penetrate the cervical canal, and eventually less than 100 sperm reach the ovum. The major energy source contributing to sperm transport derives from adenosine triphosphate (ATP).

A number of factors contribute to overall sperm motility, including the following: Age, time between ejaculations, degree of sperm maturation, energy stores, the presence of surface-active agents in the cell membranes, viscosity of the fluids to be traversed by the sperm, osmolarity, pH, temperature, ionic composition of the seminal plasma, cervical mucus, uterine fluid, oviductal or perivitelline space, and possibly substances that may stimulate or inhibit motility, such as copper, zinc, manganese, mercury, hormones, kinins and prostaglandins. The role of each of these is extremely difficult to quantify in the final performance of the sperm.

Accepted for Publication, July 1987

*Straub Clinic & Hospital
888 S. King St.
Honolulu 96813

Spermatozoa within the same ejaculate demonstrate great variability in speed and type of movement. Some sperm wander erratically, while others progress forward rapidly almost in a straight line⁴. Studies with high-speed cinemicrography indicate that sperm with morphologically normal heads swim faster than abnormally shaped sperm.

Indeed, investigators have demonstrated that the percentage of morphologically normal sperm in the cervical canal is higher than in the ejaculate⁵. It is of interest to note that sperm with abnormal heads also demonstrate dysfunctional flagellar beat, possibly owing to unknown abnormalities of intra-cellular events⁶.

The following techniques have been used to evaluate sperm motility: Microscopic observation, photomicrography, spectrophotometry and laser light-scattering. Clearly, visual assessment is inadequate in evaluating the quantity and quality of sperm movement, whereas photomicrographic techniques are highly objective, but cumbersome. Spectrophotometry and laser light-scattering measure increases in turbidity, which are a consequence of sperm swimming into a capillary pipette. These latter two methods permit objective recording of sperm velocity, usually expressed in microns per second. A normal sperm velocity is 30 - 40 microns per second⁷.

Highly accurate methods to measure sperm velocity are probably not necessary in the routine work-up of the male patient with infertility. It may well be that the most useful application of this measurement will be in selecting out the healthiest spermatozoa for ultimate artificial insemination and/or in vitro fertilization.

Sperm Penetration Into Media

The measurement of sperm penetration into cervical mucus of the sexual partner is a helpful assay, because it measures not only male components (especially motility) of fertility, but it also assesses the relative hostility of the cervical canal to penetration by a partner's sperm. Mucus penetration assays should be objective, standardized, reproducible and quantitative. Tests in which sperm and cervical mucus are mixed on a microscope slide do not fill these criteria because many variables are impossible to control. It is preferable to measure the penetration of sperm into cervical mucus within a capillary tube.

Because human cervical mucus is in limited supply, and because bovine cervical mucus is similar to human cervical mucus both in biochemical content and in its visco-elastic properties, it would seem that bovine mucus is an ideal substance in which to assay the motile behavior of sperm. The greatest advantage in using human mucus in these assays is the potential for comparing patient mucus with donor mucus and, if necessary, comparing the motility of donor sperm in both donor and patient mucus.

Many reports regarding the ability of this penetration test to discriminate between fertile and infertile males are contradictory. Mucus penetration tests are useful primarily for comparative purposes of penetration of sperm in patient and donor or artificial mucus.

These tests are also useful for cross-checking the ability of donor and patient sperm to penetrate normal mucus. Obviously, the identification and separation of normal sperm yield direct therapeutic benefit. Non-penetrating or poorly penetrating sperm may be fully evaluated by other tests.

Sperm Antibodies

Antisperm antibodies have the potential to interfere with the progression of sperm at different levels, such that the progression of sperm through the female genital tract, or sperm-egg fusion, may be inhibited. Antibodies may be present in either or both the female and the male partner, and can be found free in serum, cervical mucus, uterotubal fluids, seminal plasma, or attached to the sperm surface.

Tests to demonstrate the existence of antisperm antibodies are difficult and are of questionable specificity. However, the presence of marked agglutination or immobilization of sperm should be an indication of infertility on an immunologic basis. It is surprising that only a few studies have addressed the existence of surface sperm-associated antibodies in infertile men. Some authors have suggested that increased titers of sperm-associated IgG or IgA are not uncommon in infertile men, even when circulating antibodies are not present⁸. In fact, retrospective studies almost universally have failed to show strong correlation between the presence of circulating antibodies and altered spermatogenic function.

A number of antigens are present on the surface of mammalian sperm. Because the antibodies used in most studies are non-specific, interpretation of results is difficult. It is expected that the use of monoclonal techniques will improve our ability to detect immunologic infertility.

A great deal more remains to be elucidated with respect to immunologic causes of male infertility. However, at the present time patients presenting with sperm agglutination, sperm immobilization and male infertility of unknown cause would appear to be appropriate candidates for an immunologic investigation.

Seminal Plasma Analysis

The human ejaculate is a result of a known sequence of secretion by glands of the reproductive tract — Cowper's prostate, and seminal vesicle, in that order. A number of pathologic conditions of the accessory glands can produce alterations in the chemical and hormonal composition of the ejaculate.

For example, disturbances in prostatic function can result in low levels of seminal plasma zinc. Zinc is thought to be necessary for sperm respiration. Further, it has been found that prolactin levels⁹ and testosterone concentrations¹⁰ are both higher in ejaculates of men with infertility and abnormal semen analysis. On the other hand, 17-beta-estradiol increases human sperm motility¹¹.

It is clear that more work needs to be done in this area. Quite likely, biochemical and hormonal evaluation of seminal plasma is of significance regarding ejaculate quality. This especially appears to be true when considering the various modalities that are available today to enhance the performance of sperm in vitro.

Genital Infections

It is well-known that reproductive-tract infections may influence sperm production, transport and viability. For example, post-pubertal mumps orchitis may result in testicular atrophy and fibrosis. Similarly, tuberculosis and gonorrhea may result in obstruction of epididymal tubules. Whereas these infections are causally related to abnormalities in the reproductive tract, the relationship between symptomatic and/or asymptomatic bacteriuria and sperm fertilizing capacity is not clear.

Studies have shown that the presence of *E. coli* results in sperm clumping¹², and it also has been observed that fertile men have fewer positive seminal plasma cultures than infertile men¹³. Indirect evidence that the presence of *Ureaplasma urealyticum* and of *Chlamydia trachomatis* adversely affect the fertility potential of sperm derives from the fact that infertile individuals harboring these organisms become fertile after treatment for these infections¹⁴.

Generally, genital-tract infections should be suspected when there are more than 20 WBC per high-power field in the routine semen analysis. It should be noted that documentation of prostatic and/or seminal vesicular infection is not always easy. Cultured seminal secretion after a prolonged period of sexual abstinence is only an approximation of reality. To maximally enhance the fertilizing capacity potential, it is probably wise to treat even suspected genital infections. Fortunately, common offending organisms in the genital tract are usually susceptible to therapy with one of the tetracycline family drugs.

Sperm Penetration into Heterologous Ova

Because of increasing concern that microscopic semen analysis alone may not be the best criterion on which to judge fertilization capacity, the heterologous sperm penetration ovum assay has been developed. The test most widely in use today employs the hamster egg ("hamster test"). The appearance of over 200 publications in the last four years alone attests to the tremendous interest in this new technology. A number of recent reviews have provided comprehensive accounts of various aspects of the sperm penetration assay (SPA).

Zona-free eggs were first inseminated by heterologous sperm in 1972¹⁵. It was first shown at our laboratory at the University of Hawaii that hamster eggs could be penetrated by human sperm. The potential of using this surrogate egg as a means of evaluating fertilizing capacity of the human male sperm was immediately obvious.

Clearly, standardization of the technical details involved in performing the in vitro zona-free hamster penetration test is necessary so that results from different workers can be interpreted and compared. The recommended methodology for performance of the SPA has been described^{16,17}.

It is essential to realize that normal fertilization involves many processes other than sperm capacitation, acrosome reaction and fusion with the ovum. Therefore, positive results from these tests should be interpreted with caution and do not necessarily mean that sperm would be fertile under "in vivo" conditions. Alternatively, negative results on the SPA indicate that sperm are unable to perform at least some of the necessary steps for fertilization and would, therefore, probably be unable to fertilize in vivo.

In previous studies we have demonstrated that sperm from fertile men can fertilize approximately 56% of hamster eggs on average (range 14% to 100%), whereas the infertile group fertilizes at a rate of less than 10%. We demonstrated in earlier studies a false-negative rate with standard semen analysis of 32% and a false-positive rate of 30%. By contrast, analysis of individuals whose SPA result did not correlate with clinical fertility status, disclosed a false-negative rate (sensitivity) of 18% and a false-positive rate (specificity) of 2%¹⁸. Thus, the false-positive and false-negative rates for the SPA are much lower than for the standard semen analysis. Other workers who have been working with in vitro fertilization programs have demonstrated that there is high correlation between a positive SPA result and the fertilization of human eggs in vitro.

We have concluded from our studies that the SPA seems especially suitable for the study of couples with undetermined causes for their infertility and in whom, by definition, standard semen analysis has been normal.

In addition to its function as a diagnostic tool, the zona-free hamster egg can be used in the follow-up of patients undergoing therapy for infertility. For instance, we have previously reported cohorts of patients who have undergone varicocele¹⁹ and medical treatment with clomiphene²⁰ who were monitored by the SPA. Further, the use of various additives and/or manipulations of the semen can be carefully monitored by the SPA.

For example, theophylline, caffeine²¹ and estrogen¹¹ added to seminal plasma have been demonstrated to increase sperm penetration as measured by this assay. Another interesting application of SPA is detection of the impact of antisperm antibodies upon sperm activity. For instance, it has been demonstrated that sperm that do not demonstrate diminished motility or agglutination may, nevertheless, be unable to penetrate zona-free hamster ova²². Furthermore, a more precise rationale for the use of split ejaculates for artificial insemination may be determined by this assay. In fact, sperm mixed with donor plasma may be assayed prior to insemination, by this method²³.

Another more recent and very interesting application of the use

of this assay involves the study of chromosomal abnormalities of human sperm²⁴. The frequency of chromosomal abnormalities until now has been generally inferred as a result of studies of concepti, because chromosomal typing of spermatozoa is possible only after fertilization.

The expensive sperm penetration assay (\$150-\$325) does not replace the standard semen analysis in the evaluation of the infertile couple. If routine semen analyses are neither clearly normal nor abnormal, we perform a SPA, referring the man or woman for further evaluation, according to the results. If the routine SA is normal, we initiate evaluation of a female factor. If that evaluation uncovers no abnormality and infertility persists, or if expensive or invasive therapy of the female is planned, the SPA is done.

Because of the comparatively low sensitivity of the standard semen analysis, by using the SPA, we not infrequently discover a male factor. On the other hand, because of the high concordance between an abnormal standard semen analysis and an infertile-range SPA in the clinically infertile male, we recommend proceeding directly to further evaluation and/or therapy for the male factor in the patient whose standard assay is subnormal.

It needs to be stressed that the SPA does not always faithfully reproduce in vivo conditions. Specifically, sperm concentration is adjusted, sperm migration within the female genital tract is not assessed, and the barriers of cumulus and zona pellucida are removed. It is unlikely, however, that sperm will fertilize an ovum in vivo if the sperm-entry test is negative. On the other hand, a positive SPA does not guarantee successful in vivo fertilization.

What then, does the SPA really tell us? It gives us an evaluation of the man's sperm that is highly correlated with true fertility in vivo. How can it be used clinically? It can be used in identifying male factor infertility and in selecting and monitoring treatment. Is it an asset to an infertility work-up? Yes, but it may not be required as an integral part of an initial work-up. It is especially useful in unexplained infertility and when routine semen parameters are not clearly abnormal. SPA is certainly not "the test" to answer all male infertility questions. However, it comes closest to evaluating adequately the functional potential a sperm was designed to achieve: Egg penetration.

Summary

A review of new methods and those on the horizon for the evaluation of male infertility has been presented. It is clear that, as of the present time, no single assay is in the forefront. In fact, the painstaking performance of standard semen analysis will most often guide the practitioner to more specialized tests of sperm dysfunction, which hopefully, will identify defects in sperm function that can be corrected. It is anticipated that the explosion of interest in the area of in vitro fertilization technology will result in greater precision as regards to the classification and treatment of male infertility.

REFERENCES

1. MacLeod J, Gold RZ: The male factor in fertility and infertility. II. Spermatozoan counts in 1,000 men of known fertility and in 1,000 cases of infertile marriage. *J Urol*: 66:436, 1951.
2. MacLeod J, Wang Y: Male fertility potential in terms of semen quality: A review of the past, a study of the present. *Fertil Steril*: 31:103, 1979.
3. Farris EJ: The number of motile spermatozoa as an index of fertility in man: A study of 406 semen specimens. *J Urol*: 61:1099, 1949.
4. Katz DF, Diel L, Overstreet JW: Differences in the movement of morphologically normal and abnormal human seminal spermatozoan. *Biol Reprod*: 26:566, 1982.
5. Botella-Llusia J, Ruiz Velasco V: Postcoital test in vitro. *Int J Fertil*: 5:301, 1960.
6. Katz DF, Overstreet JW: Biophysical aspects of human sperm movement. In the Spermatozoan, Edited by DW Fawcett, JW Bedford. Baltimore, Urban and Schwarzenberg, 1979, p.412.
7. Janick J, MacLeod J: The measurement of human spermatozoan motility. *Fertil Steril*: 21:140, 1970.

(Continued on page 359)

REAL ESTATE OPPORTUNITIES

REAL ESTATE SERVICES

Member: The Honolulu Board of Realtors and MLS
**A TOTAL STAFF — AND REALTY SERVICE
 IN WAIANAE**



Anne White (R)

Larry Hatfield (PB)
 Madeline Mong (RA)
 Doris Oshiro (RA)
 Jill Johnson (RA)
 Paul Carter (RA)
 Sharon Moore (RA)
 Bob Hoffman (RA)



Marie Hatfield (R)

Alberta Keamo (RA)
 Arch Cook (RA)
 Valerie Cook (RA)
 Denise Martin (RA)
 C. Gay Hatfield (RA)
 Phylis Perry (RA)
 Renee Kamikawa (RA)

**Call:
 696-8415**

PROPERTY OF THE MONTH

Custom 1 acre + lots Makaha
 Valley - Mauna'Olu Estates.

HAWAII HATFIELD REALTY CORP.

85-833 Farrington Hwy., Waianae

SALES • VA/FHA • MANAGEMENT • NOTARY



KOKO KAI JEWEL

A page out of Architectural Digest ... Sky-lit, SPACIOUS, airy home brightened by its bleached oak floors and picture windows overlooking spectacular Diamond Head and the ocean. Extensively remodeled, ideal for entertaining, as well as everyday living! Gorgeous pool. Licensed owner.

\$1,300,000 (FS).....MLS 39533

CAROL LIN (RA) 395-2203

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
 732-1414

HAWAII KAI OFFICE
 395-7522

THE ULTIMATE!!

...in elegant condo living for the busy executive or professional family is found at beautiful ADMIRAL THOMAS. Our elegant 2 bedroom 2 bath apartment of over 1700 sq. ft. features a large formal dining room and over a 300 degree view of ocean and mountains. \$450,000.

★★★★★★

...in luxury country living is found in this charming FEE SIMPLE OCEANFRONT home of 2 bedrooms, den and two baths. Walls of glass frame the ever changing ocean vistas and the Monier tile roof and stucco construction of this meticulously maintained 8 year old residence will provide many years of carefree living. \$345,000.

Call Bill or Ginger Sinsabaugh (R)
 for appointments.



Waterfront Properties
INC.

1188 BISHOP ST., #2407

531-5311

VACATION IN STYLE



Make your HAWAII VACATION one to truly remember! This lovely Kahala Avenue home is available by the week or for longer holidays. Two bedroom suites, country kitchen, enclosed brick lanai, walled gardens for privacy and only one house from a swimming beach. ENJOY!

\$1,750/wk or \$6,000/mo.

Call Nancy J. Bathen (R) 395-4565

HILL & CO.

specialists in fine residential properties

HONOLULU
 373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821

REAL ESTATE OPPORTUNITIES



OCEANFRONT KOKO KAI

Private, gated estate with a circular driveway, situated on over 20,000 sq. ft. of Fee Simple land. Main residence of 5-bdrm/5-bth. enjoys magnificent views of ocean, mountains & Diamond Head. Wrap-around 900 sq. ft. deck overhangs the gently rolling surf. Pool & separate, spacious 2-bdrm. guest house complete this idyllic setting.

MLS 38789

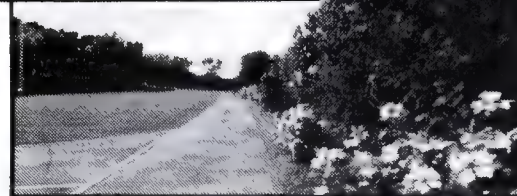
\$2,500,000

Call Marysia Coleman (R) 735-5168
or Penny Bradley (R) 523-0456

Bradley
PROPERTIES LTD.
(808) 523-0456

1177 Kapiolani Blvd., Honolulu, HI 96814

Dupukea Highlands



This tranquil country estate with exquisite gardens and stunning views is less than an hour drive from Honolulu. 5,000 sq. ft. of luxury living including huge upstairs master suite, fireplace, recording studio, exercise room, sauna, illuminated lawns and nursery.

Fee simple. \$1,300,000.

Dave Dziuban (RA) 396-9486

Patricia Kelley (RA) 262-2636

Libbe Company

1060 Young St., #210 523-1381

Hono., HI 96814

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



AINA HAINA ESTATE

Opihi St. Stately kamaaina style home of 4 Bdrms/3 baths plus 2 bdrm/2 bath and studio apt. on a 20,042 sq. ft. Fee Simple lot. Designed for gracious living with large airy rooms, ohia floors, open lanais & valley views. (MLS 34884)

\$595,000

Vivian Fagan (R) 373-2351

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

SCULLY ROGERS LTD. PRESENTS



NUUANU AT ITS BEST

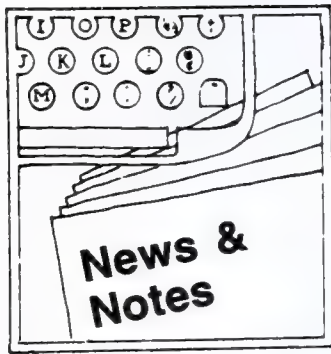
27,499 SQUARE FEET OF BEAUTIFUL NUUANU. QUIET, PEACEFUL, AND FEE SIMPLE. PRESENTLY BEING USED AS A CHURCH. . . CAN BE CONVERTED TO AN ESTATE. A RARE, RARE FIND TO THOSE WHO KNOW AND SO APPRECIATE.

\$745,000

Scully Rogers
LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 715, Honolulu, Hawaii 96815



HENRY YOKOYAMA, MD

Life in These Parts . . .

In Praise of Physicians: In March, Kailua pediatrician Jim Mertz saw a visiting Mainland mother's sick child. The child had a convulsive seizure in Jim's office while waiting for lab results . . . Jim forthwith treated the convulsion and personally drove both mother and child to KWCMC where the child was admitted and recovered . . .

During the hospitalization, Jim called the anxious mother daily to report the child's progress . . . The mother was so impressed she wrote a letter to Jack Lewin, state director of health, as follows: "I'm grateful to have found such a good doctor when I was so far from home. Hawaii is indeed fortunate to have as fine a professional as James Mertz,

MD" . . . Jack wrote Jim: "In an office where it is most frequent to hear complaints, it is a pleasure to receive such a positive letter . . . Keep up the good work." (Ed.: If we know Jim, he must have said, "Pshaw! It was nothing" . . .)

☆☆☆

Hawaiian-Rent-All Sign: Our Chairs and Tables Honor Graduate Bottoms." (Tables, too?)

☆☆☆

May 5 QMC General Staff Meeting: QMC recently had 55 more patients/day in census than usual . . . This compounds the problem of 50 RN vacancies . . . Since Jan. 1, QMC had hired 45 new nurses and lost 35 for a net gain of 10 . . . Prospects are dim . . . Hawaii Loa College plans to graduate 40 RNs in three years (reported by Fred Reppun).

Interesting facts . . . (from Lou Boyd's column, June 8)

"Said a writer named Andrew Greeley: 'Books, like babies are easy to conceive, but hard to deliver.' " (Ed.: Especially with \$48,000/yr. malpractice premiums . . . Discouraging, wot?)

"If you want to put about 400 muscles to work, take a walk" . . . (Ed.: Where does Lou get such interesting data?)

Physicians Speak Up

The fluoridation issue was again defeated in this year's legislation . . . R. Summer-Mach, Hilo physician, writes: "It baffles me that individuals with the obvious dedication and commitment of Mr. Jack Davis expend so much of their life energy in fighting a cause so innocuous as water fluoridation . . . A good promotional campaign would quickly wipe out the kind of unsubstantiated opposition put up by the opponents of fluoridation. But our society has rarely been willing to spend money for prevention of anything — least of all dental decay . . ." (Ed.: We remember so vividly how 20 years ago, at our suggestion, Shigeo Natori, Manuel Kau and we went on KOHO (Japanese radio) to promote fluoridation. An elderly woman called to ask Shig what should she do if she doesn't want to drink fluoridated water . . . Shig jested "You might dig your own well." Poor Shig, for months he was besieged by anonymous callers at home and at the office condemning him for his suggestion . . . Such are the vicissitudes of life when we take a stand even with good intentions . . .)

Likewise at a KMC Quarterly on June 12, nursing administrator Nancy Gemignani reminded us that the RN shortage was nationwide and extolled the difficulties encountered in recruiting nurses . . . Nancy even offered to personally wash the car of any physician who managed to recruit an RN for the hospital . . . At the same meeting, disgruntled neurosurgeon Ray Taniguchi asked "Why are we spending \$250,000 a year for TV ads?" (Ed.: A question we wished we had asked) . . . Assistant administrator Gary Fujiwara tried to appease the physicians by explaining that KMC had only spent \$175,000 and that the monies did not come from physician contributions . . . (Ed.: We still fail to understand why local hospitals and large groups are spending so lavishly in advertising their wares while there is a bed shortage caused by nursing staff shortages . . .)

FROM THE MONUMENTS OF THE GOD KINGS. ANGKOR WAT, CAMBODIA.



*KHMER Sculpture
Bronze Lokeshvara
12th - 13th Century
The Bayon, Angkor Wat Cambodia*

Perhaps the most difficult art for the collector or investor to obtain are the relics from the ancient temples of Cambodia.

Treasures of Asia has acquired distinctive antique Khmer pieces and extends an invitation to view the collection. Each particular object is accompanied by a certificate of authenticity.

Please call to ensure we are in the office.

TREASURES OF ASIA INC.,

SUITE 1007 EXECUTIVE CENTRE,
1088 BISHOP STREET,
HONOLULU, HI 96813 • TELEPHONE 537-3202

Unusual vacation dept.: Urologist Bill Davis and wife Rosalie are spending their two weeks in Palau, Micronesia, doing urological surgery (Don Chapman, June 3).

Obituaries: Plantation physician James Fleming, 78, of Wailuku, Maui, died at home on May 11. "Doc" Fleming and wife Elizabeth were named "Great Americans" three years ago and honored by first lady Nancy Reagan. "Doc" was recognized for his humanitarian work, e.g., serving on medical missions in Africa, at a Tom Dooley hospital in Laos and a Navajo reservation in Utah. Doc also served on the Territorial Board of Education; he was elected to the state Senate in 1964 and was active in Maui community organizations, in the Salvation Army, YMCA and Sierra Club . . .

Dermatologist Philip Hellreich, chairman of the American Cancer Society on the Hawaii subcommittee on skin cancer/melanoma says: "If you're getting enough sun to tan, you're getting enough to do damage . . . Ten years ago, physicians saw skin cancer in one out of 300,000 patients. Today, the odds are one in 100, with the projection five years hence to be one in 70. Hawaii ranks the highest in the world for melanomas in Caucasians. Regarding the hitherto insignificant rate of skin cancers in Orientals, Philip comments: "I'm seeing a not insignificant number of skin cancers in Asians." He feels that Asians are becoming more active in outdoor activities and abandoning traditional beliefs of fair skin as a sign of beauty . . .

Miscellany

Why did the moron get condoms for his ears?
So he wouldn't get hearing aids. (Our thanks to Betty Anderson)

☆☆☆

Excerpts from a May 14-20 1987, issue of a Windward Sun Press article titled: "Say What? The worst writing provides some of the best reading." (These are said to be actual letters received by welfare authorities . . .)

"I am forwarding my marriage certificate and six children. I have seven, one died which was baptized on a half sheet of paper."

"Mrs. Jones has not had any clothes for a year and has been visited regularly by the clergy."

"I cannot get sick pay. I have six children. Can you tell me why?"

"I am glad to report that my husband who was missing, is dead."

"Please find out for certain if my husband is dead. The man I am living with can't eat or do anything until he knows."

"I am very annoyed to find that you branded my son illiterate. This is a dirty lie, as I was married a week before he was born."

"In answer to your letter, I have given birth to a boy weighing 10 lbs. I hope that this is satisfactory."

"In accordance with your instructions, I have given birth to twins in the enclosed envelope."

"I have no children as yet, as my husband is a truck driver and works night and day."

"I am forwarding my marriage certificate and three children, one of which is a mistake as you can see."

"My husband got his project cut off two weeks ago and I haven't had any relief since."

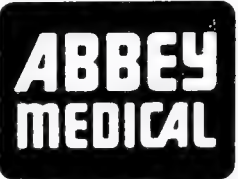


CONTINUITY-OF-CARE™

24 HOURS A DAY

By combining your expertise and ours for complete patient care, our flexible Continuity-of-Care™ programs enable us to design the optimum home care program for you.

Hawaii's most complete homecare supplier



500 Ala Kawa Street
Honolulu, Hawaii 96817
845-5000

*Did
you
know?*



Saint Francis
Medical Center

Discover the Difference

Did you know that Saint Francis Medical Center is now a surgical leader?

The only one doing organ transplants, both kidney and bone marrow, and a leader in laser surgery.



"I want money as quick as I can get it. I have been in bed with the doctor for two weeks and he doesn't do me any good. If things don't improve, I will have to send for another doctor." (Our thanks to Fred Reppun who sent us the clipping.)

☆☆☆

"Hydrocourtesan": A call girl who entertains her clients on a water bed. (Anonymous Contributor)

☆☆☆

"Father Reilly," the Mother Superior said, "I thought you should know that we have a case of syphilis in the convent."

"Oh, good," replied the priest, "I was really getting tired of the Chablis." (Anonymous Contributor)

Hors de Combat

The Board of Land and Natural Resources met in May to decide whether to spray Chevron weed-oil on marijuana patches on Maui, Molokai and the Big Island . . . Law enforcement officials estimate that 70% to 80% of marijuana cultivation is in remote forested land — much of which is state conservation land. The Division of Forestry and Wildlife was in favor of spraying because marijuana growers destroy native vegetation . . .

Conservation groups also supported spraying since marijuana cripples Ohia forests . . . Maui physician Steven Moser opposed spraying because he felt the EIS (Environment Im-

pact Statement) was incomplete in terms of the health effects of the weed-oil. Steven felt that people downwind and downstream may be repeatedly exposed to the sprayed oil . . .

When a Star-Bulletin article in April stated that "the United Cancer Council Inc. spent 97% of the funds on fund raising activities," H.P. Groesbeck, chairman of the American Cancer Society Public Education Committee, wrote to the Garden Isle that the American Cancer Society, founded in 1913, consistently spends less than any other volunteer service organization, e.g. 16% of the funds for fund raising, while funding research with 24% of the \$64 million raised nationwide per year. In Hawaii, only 8% of the income is spent on management and 49% is spent on direct public service . . .

While Hawaii's \$25 million papaya crop may be in jeopardy because of fruit fly larvae, plans to build a \$5 million irradiation facility in Hilo for treatment of papayas may also be in jeopardy . . . Thirty Big Island doctors, in a signed public statement, pointed out that "The use of Cesium-137 (a nuclear waste product of power and munitions plants) in an irradiator would pose radiation hazards to workers at the facility, and in case of accident, to the community at large."

The president's proposal for sweeping AIDS tests drew negative reactions here . . . The question is: "If you know someone carries the AIDS virus, or has come in contact with it, what can be done with the information?" Premarital testing in Hawaii could cost up to \$3 million the first year for setting up the program . . . Christine Nevin-Woods of the state Department of Health's communicable diseases division says: "That would probably only yield 10 positives out of all the marriage applicants."

The future of Kauai Veterans Memorial Hospital is at stake . . . State Health Director Jack K. Lewin reported that KVMH is operating at a deficit and was subsidized to the tune of \$1.4 million this year. Jack feels that if a medical group could be enticed to establish offices at the underused facility, the hospital could be saved. The 44 hospital beds are 40% occupied and the staff numbers 170. Garden Island Medical Group spokesman Mariano Torres feels that the state may lose money, but the community needs the hospital facility as an acute care provider . . .

Yone Miyashiro, GIMG founder, says "The state has wasted money in a lot of other areas, but not in health. Lots of lives are saved because we have outlying hospitals . . . Accessibility is one of the most important aspects of the smaller hospital..." John feels that the emergency facilities should be improved; long-term care, an outpatient clinic, or even a mental health facility could be established to save the facility . . .

From the Horse's Mouth

Daniel Mishell Jr., visiting professor from USC (professor and chairman of the Ob-Gyn department and current president of the American Academy of Ob-Gyn) lectured on "Estrogen in the '80s and Osteoporosis" . . . Herein are excerpts from his lecture . . .

Re: Menopause: Defined as cessation of menses . . . i.e., when the gonads stop producing steroids . . . A genetically predetermined event . . . Average age 52 in the U.S.

What Is The State of Your 1987 Taxes?

If you are an Hawaii resident, in 1987 you could pay up to 42.02% in taxes to the state of Hawaii and to the federal Government. (Based on the maximum 1987 federal tax rate of 38.5% and the Hawaii state tax rate as of 10/1/86.) Now is the time to take a close look at the tax advantages of Seligman Tax-Exempt Fund Hawaii Series!

The Series Offers:

- INCOME EXEMPT FROM FEDERAL INCOME TAXES
- INCOME EXEMPT FROM THE PERSONAL INCOME TAX OF HAWAII

It's Time to Choose a Professionally Managed
Double Tax-Exempt Bond Portfolio

INVESTIGATE SELIGMAN TAX-EXEMPT FUND
HAWAII SERIES

EFHutton

E.F. Hutton & Company Inc.

2500 Pauahi Tower, 1001 Bishop Street
Honolulu, Hawaii 96813
(808) 521-2961

Yes! Send me a prospectus which contains more complete information on Seligman Tax-Exempt Fund Hawaii Series including information about the sales charges and other expenses. I understand that I should read it carefully before I invest.

MAIL THIS COUPON OR CALL 521-2961 TODAY!

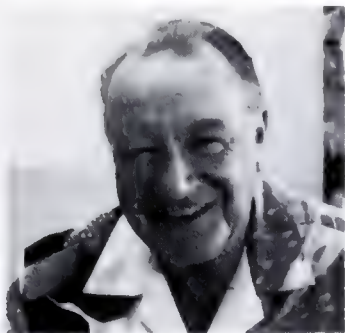
NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

DAYTIME PHONE _____ HOME PHONE _____

6/87



Frank E. Ceccarelli, M.D.,
Urology



Susan H. Chapman, M.D.,
Obstetrics/Gynecology



Bernard Fong, M.D.,
Cardiology



Alvin Furuie, M.D.,
Pulmonology



Thomas Y. Ito, M.D.,
Urology



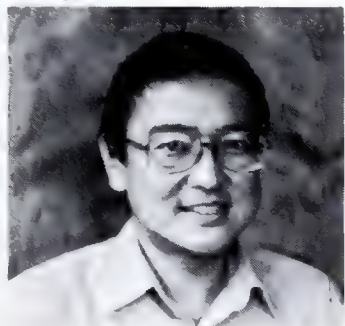
C. W. Lehman, M.D.,
Allergy



Richard Y. Mitsunaga, M.D.,
Pediatrics



Jeffrey Nakamura, M.D.,
Hematology/Oncology



James E. Oda, M.D.,
Orthopedic Surgery



George Shimomura, M.D.,
Obstetrics/Gynecology



Paul I. Sunahara, M.D.,
Dermatology



Henry L. Yim, M.D.,
Pediatrics

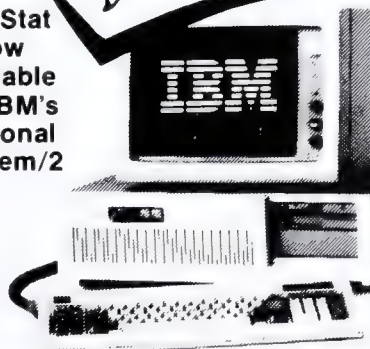
What do these doctors have in common?

*Visit us at the
HMA Convention!
October 9-11
Booth #12*

- Efficiency in office management
- Control and action in accounts receivable
- Fast turnaround on paperless claims

When you see your colleagues, ask them about their DataStat computer system. Then call us for an appointment to see DataStat for yourself. **944-3554**

DataStat
is now
available
for IBM's
Personal
System/2



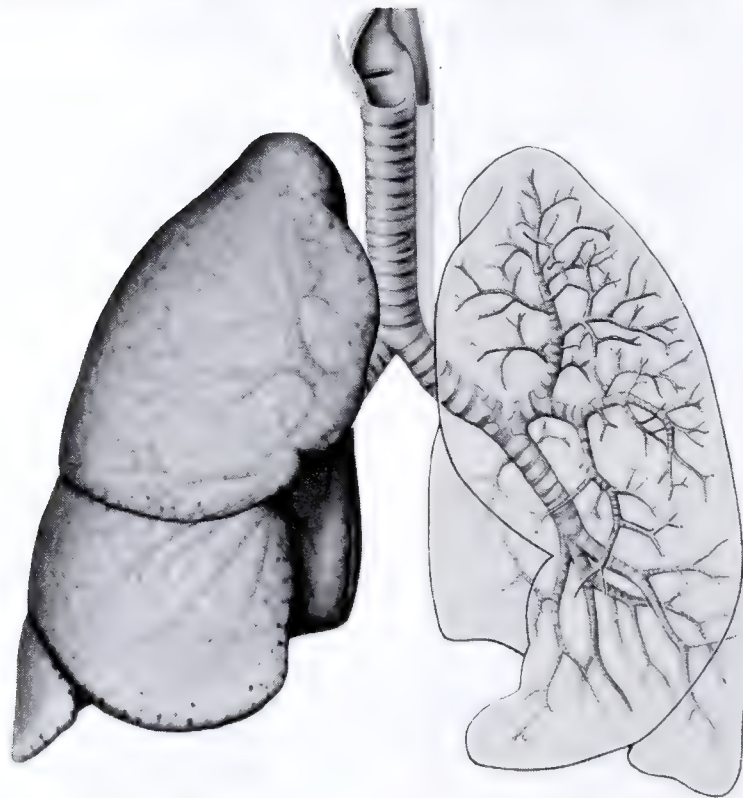
Personal Computer AT is a trademark of
International Business Machines Corporation

DATASTAT



The Professional Office Management System by ISI, an HMSA Subsidiary

Consider the causative organisms...



Ceclor[®]
ceclor

250-mg Pulvules[®] t.i.d.

**offers effectiveness against
the major causes of bacterial bronchitis**

Haemophilus influenzae, Streptococcus pneumoniae
(ampicillin-susceptible and ampicillin-resistant)

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor[®] (cefactor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β -hemolytic streptococci).

Contraindication:
Known allergy to cephalosporins.

Warnings:
CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.
Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it
- Prolonged use may result in overgrowth of non-susceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

- Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%.

- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertension, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistix[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

[07286R]

PA 8794 AMP

©1987, ELI LILLY AND COMPANY



700241

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285
Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

Re: Estrogen Replacement Therapy: Prolongs life by reducing cardiovascular events . . . Hot flashes in women in their 40s even with regular menstrual cycles are secondary to reduced estrogen levels . . . women produce more estrogen than slim women and have greater risk of endometrial carcinoma because of unopposed estrogens . . .

Re: Postmenopausal Estrogen Deficiency: Causes atrophic vaginitis; prolapsed uteri; bladder mucosal atrophy (with dysuria, stress incontinence, nocturia, etc.); urethral pressure, skin atrophy etc. . . .

Re: Hot Flashes: Last about 4 minutes and occur periodically; secondary to increased LH; usually nocturnal. Treat with estrogen 0.625 to 1.25 (depending on severity of symptoms) at bedtime . . . For women who cannot take estrogen, e.g. with breast and endometrial carcinoma, use oral Provera or depot Provera (150mg q 3 mos.) . . . Carcinoma of the ovary and cervix are not contraindications for estrogen therapy . . . Estrogen improves the psychological outlook in women even without flashes . . . They sleep better . . .

Re: Risk of Estrogen Replacement: (a) No correlation with breast CA, (b) endometrial CA is related to dose and duration (10-year use) of estrogen replacement . . . A well-differentiated carcinoma cured by hysterectomy and usually not lethal to patient . . .

Re: Progestogen: Progestogen reduces both E-receptors and P-receptors whereas estrogen raises E- and P-receptors . . . Progestogen used 12 days each month, i.e., 25 days of estrogen and 12 days of progestogen . . . Provera 10mg raises LDL and reduces HDL cholesterol; whereas Provera 2.5mg given continuously will lower LDL and not affect HDL levels . . .

Re: Estrogen — Progestogen use: *Premarin 0.625 with Provera 2.5mg given sequentially reduces withdrawal bleeding . . .*

Re: Estradiol Skin Patch: "Like an ovary stuck to the skin" . . . No data on cardioprotective effect . . .

Re: Post-hysterectomy patient: Use of progestogen with estrogen: No evidence that progestogen reduces breast CA . . .

Progestogen effect on lipids should be considered . . .

Re: Estrogen Replacement: Who should receive replacement therapy? . . . Most women should be on estrogen for its cardioprotective effect as well as other beneficial effects . . . Absolute contraindications for estrogen Rx: (a) breast or uterine CA, (b) acute liver disease and (c) thrombophlebitis or thromboembolism . . .

Re: Osteoporosis: 50% less bone causes fractures . . . 25% of white and Oriental women develop osteoporosis . . . Fractures of the spine are secondary to trabecular bone loss (Type I); hip fractures are secondary to cortical bone loss . . . Measure the heights of postmenopausal women . . . Hip fractures occur in 25% of women over 65 with osteoporosis . . . One out of five die within six months . . . Estrogen therapy reduces the incidence of hip fractures by blocking PTH (bone resorption) . . . Type I osteoporosis develops within 10 years postmenopausal . . .

Re: Estrogen Replacement: Women treated five years with estrogen reduce spine fracture incidence by 50% to 60% . . . Hip fracture incidence is reduced 65% . . . Women without estrogen therapy have a 10 times greater risk for hip fracture . . .

Re: Screening Studies: (a) Radiographic changes do not show until there is 13% bone loss, (b) single photon absorptometry (SPA): Not adequate, (c) dual photon absorptometry (DPA): Not cost-effective, (d) quantitative computed tomography (QCT): Also not cost-effective . . .

Re: Evaluation of Risk Factors: (a) Family history, (b) poor diet, (c) poor lifestyle, (c) low estrogen level, (d) illness or use of drugs . . .

Re: Prevention of Osteoporosis: (a) Estrogen is the best . . . minimum dose of Premarin 0.625, (b) exercise, (c) calcium (calcium supplements alone do not prevent bone loss . . . calcium supplements with Premarin 0.3 prevent bone loss . . . vitamin D supplements not necessary), (d) stop alcoholic intake and smoking . . .

Re: Vascular Effects of Estrogens: Synthetic estradiol in oral contraceptive pills increases angiotensin levels and in turn raises blood pressure and causes thrombosis . . . whereas Premarin does not raise blood pressures, does not raise globulin levels, or cause thrombosis . . . Estrogen receptors in blood vessels actually lower blood pressures . . . Incidence of myocardial infarcts is 50% lower in women on estrogen . . . clotting factors are not affected by estrogen . . . Even smoking women on estrogen have a 20% less risk of MI (Framingham and Stanford studies).

CLASSIFIED NOTICES

To place a Classified Notice call Leilani at 521-0021.

4 line minimum, approximately 5 words per line. Payment must accompany order.

EMPLOYMENT OPPORTUNITIES

CHAIRPERSON

The Employees' Retirement System of the State of Hawaii is accepting applications for the position of Chairperson of the Retirement System's Medical Board. The applicant must be a medical doctor or osteopathic physician licensed in the State of Hawaii.

The chairperson is the principal medical advisor to the Board of Trustees of the Employees' Retirement System. The duties of the Medical Board are set forth in section 88-31, Hawaii Revised Statutes, and include arranging for and passing upon all medical examinations required by statute in connection with employee applications for disability retirement benefits. The board investigates all essential statements and certificates submitted by or on behalf of the employee, and reports conclusions and recommendations in writing to the Board of Trustees. The report will normally be written by the chairperson.

The chairperson routinely will be required to testify from time to time in trial-type administrative hearings conducted under the Hawaii Administrative Procedures Act and may be required to testify occasionally in court proceedings. It is expected that approximately four hours per week will be devoted to preparation for and testifying at hearings.

The chairperson is assisted by two board members who also are licensed physicians. Actions and recommendations of the Medical Board require the concurrence of two members.

Clerical assistance is provided by the Employees' Retirement System; however, the chairperson must maintain his or her own office accommodations.

The Board will be expected to utilize outside consultants to the extent necessary to assure just, accurate, and complete disability evaluations. Fees for such consultation are paid by the Employees' Retirement System.

Compatible outside employment is permitted on a not-to-interfere basis only. The position of chairperson must take priority over other professional activities, and is to be considered the chairperson's primary responsibility.

Salary range for the position is \$45,000.00 to \$60,000.00 per year, depending upon qualifications and experience.

Applications, including complete resume/curriculum vitae, should be submitted on or before September 30, 1987 to Jerry Ruthruff, Esq., Chairman of the selection committee, at the following address:

Employees' Retirement System
of the State of Hawaii
Suite 502
888 Mililani Street
Honolulu, Hawaii 96813

EMPLOYMENT OPPORTUNITIES

WANTED

General Internist for multi-specialty group on Maui. Position avail. immed. Contact D.S. Gilbert, MD. 130 Prison St. Lahaina, HI. 96761. Ph. (808)-661-0051.

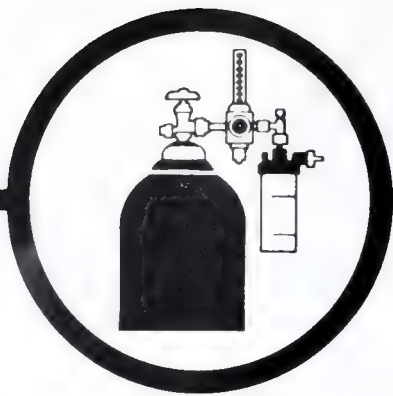
OFFICES

Has parking been a problem for you and your clients? Call us today! We have the office space for you with ample free parking. Bobbie Martinsen (R) 521-0321 HAWAII MANAGEMENT CORP.

Feature Article: Gone Today Hair Tomorrow

By Mike Okihiro (Extracted from KMC Newsletter Jan. Feb. 1987)

Hope is a great thing. It makes one smile and brings good cheer to all who see that smiling face. It makes one walk with a quick spring — as though his feet were lighter than air. Hope promises something good for tomorrow and lifts up the spirit where previously it may have been dragging clear to the floor.



CONTINUITY-OF-CARE™

24 HOURS A DAY

By combining your expertise and ours for complete patient care, our flexible Continuity-of-Care™ programs enable us to design the optimum home care program for you.

Hawaii's most complete homecare supplier



500 Ala Kawa Street
Honolulu, Hawaii 96817

845-5000

STOP!

LET US PAY YOU TO INCREASE YOUR PATIENT-BASE!

Increase your cash flow and
provide your patients with the most
cost-effective & affordable method
of preventative dentistry.

OVER 8,000 PATIENTS ENROLLED



American Dental Plan

To become a provider call:

487-1599

And nowadays, you'll see many doctors with smiles on their faces and a bounce to their feet — all because of minoxidil, a wonder drug that promises to bring back hair to the balding scalp. A number of well-documented studies have shown that 2% to 5% topical minoxidil applied to the balding scalp can achieve "cosmetically acceptable hair growth" there.

Of course, not everyone wants to grow hair back. There are claims that a balding man is more virile and sexy and others claim that baldness and intelligence go hand in hand. It has been said that the latter group tends to go bald from the back of the head and the former from the front — or is it vice versa?

Then, there is the Japanese physician who claims that Tokugawa Ieyasu, the great historical 17th century shogun of Japan, probably began to go bald prematurely, and all the samurai who followed him, had to shave their heads in the well-known haircut of that romantic era. However, the samurai hairdo has long gone out of style and since minoxidil shows such great promise, more and more of our youthful but balding physicians have turned to this drug . . . hope springs eternal . . . (Ed.: Our apologies to Mike for the deletions).

Oncology Conference

A 51-year-old obese woman with a history of heavy smoking had a standard ileostomy and bladder resection for transitional cell carcinoma . . . Moderator Glenn Kokame turned to radiotherapist Ed Quinlan: "What do we do now?" Ed was explicit: "There are a million ways to treat bladder CA . . . which means there are no good ways . . ." Urologist William Shiraki added: "There's even turmoil re preop and postop radiation. We quit preop radiation five or six years ago. Incidentally she had a standard ileostomy, but with younger patients, we can even use the appendix . . . We have finally found a use for the appendix . . ." Glenn asked pathologist Grant Stemmerman "How about the etiology?" Grant was unsympathetic: "She did it . . . she was a smoker . . ." Glenn: "How about diet?" There was an emphatic "No!" from Grant . . .

National News...

Health care costs are rising more slowly than in previous years . . . but still cost each American an average of \$127 more last year than in 1985 . . . William Roper, head of the Federal Health Care Financing Administration, reported that we spent \$458 billion on health care in 1986, which represents 10.9% of the gross national product . . . The 8.4% increase for 1986 was the second lowest in the last two decades and "this positive sign shows we can be successful with measures to slow the growth of health care inflation . . ."

REFERENCES

(Continued from page 349)

8. Haas GG Jr, Schreiber AD, Blasco L: The incidence of sperm-associated immunoglobulin and C3, the third component of complement, in infertile men. *Fertil Steril*: 39:542, 1983.
9. Purvis K, Landgren BM, Cekan Z, Diczfalussy E: Indices of gonadal function in the human male. *Clin Endocrinol (Oxf)*: 4:247, 1975.
10. Moreno-Escalón B, Ridley AJ, Wu ChH, Blasco L: Hormones in seminal plasma. *Arch Androl*: 9:127, 1982.
11. Chan SYW, Tang LCH, Ma H-K: Stimulation of the zona-free hamster ova penetration efficiency by human spermatozoa after 178-estradiol treatment. *Fertil Steril*: 39:80, 1983.
12. Dahlberg B: Asymptomatic bacteriospermia: cause of infertility in men. *Urology*: 8:563, 1976.
13. Toth A, Lesser ML: Asymptomatic bacteriospermia in fertile men. *Fertil Steril*: 36:88, 1981.
14. Toth A, Lesser ML: Ureaplasma urealyticum and infertility: The effect of different antibiotic regimens on the semen quality. *J Urol*: 128:705, 1982.
15. Yanagimachi R, Yanagimachi H, Rogers BJ: The Use of zona-free animal ova as a test-system for the assessment of the fertilizing capacity of human spermatozoa. *Biol Reprod*: 15:472, 1976.
16. Rogers BJ, Van Campen H, Ueno M, Lambert H, Bronson R, Hale R: Analysis of human spermatozoal fertilizing ability using zona-free ova. *Fertil Steril*: 32:664, 1979.
17. Rogers BJ, Perrault SD, Bentwood BJ, McCarville C, Hale RW, Soderdahl DW: Variability in the human-hamster in vitro assay for fertility evaluation. *Fertil Steril*: 39:204, 1983.
18. Rogers BJ: The sperm penetration assay: its usefulness re-evaluated. *Fertil Steril*: 43:821, 1985.
19. Mygatt GG, Soderdahl DW, Rogers BJ: In vitro fertilization rates after varicocele repair. *J Urol*: 127:1103, 1982.
20. Limsenmeyer TA, Soderdahl DW, Rogers BJ: The impact of clomiphene in oligospermic men as monitored by the sperm penetration assay, 80th Annual Meeting, American Urological Association, Atlanta, May 1985.
21. Rogers BJ: Factors affecting mammalian in vitro fertilization. In: Jagiello G, Vogel HJ, eds. *Bioregulators of reproduction*. New York, Academic Press, 1981, p 459.
22. Dor J, Rudak E, Aitken RJ: Antisperm antibodies: Their effect on the process of fertilization studied in vitro. *Fertil Steril*: 35:535, 1981.
23. Kanwar KC, Yanagimachi R, Lopata A: Effects of human seminal plasma on fertilizing capacity of human spermatozoa. *Fertil Steril*: 31:321, 1979.
24. Rudak E, Jacobs PA, Yanagimachi R: Direct analysis of the chromosome constitution of human spermatozoa. *Nature*: 274:911, 1978.

Professional Buyer's Guide HEALTH CARE & ORTHOPEDIC PRODUCTS

- Cervical Collars
- Abdominal / Rib Binders
- Orthopedic Supports / Lumbar Sacral, & Orthocast
- Extremity Braces Supports
- Sleep Pillows
- Wedge Recliner Pillows
- Posture Backrest
- Contourpedic Cushions
- Medical Massage Vibrators
- Cervical Traction Pillows
- Children's Furniture
- Executive, Secretarial & Lounge Furniture
- EZ Sleep Mattress / Pillows
- Adjusting - Therapy - Examination Tables

***Charge It: Use Your Credit Card
To Order Call TOLL-FREE
1-800-321-6870 (national)
1-800-238-7698 (in Ohio)**



Posture Support Mfg., Inc.

P.O. Box 39370
Solon, Ohio 44139

*When ordering ask for literature and price list

"I just put more time in my day."

"If you're like me, time is your most precious commodity. And you probably spend 110% of it trying to be in three places at once."

"With a Honolulu Cellular Telephone, I can take the features and convenience of an office phone wherever I go. For a lot less than you might think."

"Now I can organize all my activities while I'm on the road. Talk with the press. Coordinate meetings. Even put together a bed race. And have more time to go the extra mile."

CAROLE KAI, Founder,
The Carole Kai International Bed Race

**Honolulu Cellular
Telephone Company**



Hawaii's choice for quality cellular service

1161 Kapiolani Boulevard, Honolulu, Hawaii 96814 545-4765

ERICSSON

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo)
	329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**



Over the Editor's Desk

STEPHEN R.P.K. BRADY, MD

SUPPORT FOR FAMILIES OF ALZHEIMER'S VICTIMS — Victims of Alzheimer's disease suffer from intellectual impairment, physical debilitation, and eventual death. But the families of Alzheimer's victims suffer from another set of symptoms — fear, emotional distress, financial hardship, and often isolation as they watch an incurable disease claim their loved ones.

In the past few years, families of Alzheimer's patients have been receiving much needed support from several institutions which treat the disease. At The Institute on Aging at San Francisco's Mount Zion Hospital and Medical Center, the Alzheimer's Day Care Center offers patients therapeutic, recreational, and social activities, while also providing respite for the family. In addition, the Center offers family support groups which meet twice monthly to discuss concerns, share problem-solving skills, and explore issues such as behavior changes or even friends' misdirected fears of contagion. Assisted by hospital social workers, the support groups feature pertinent guest speakers including lawyers, pharmacists, physicians, and neuropsychologists.

In addition to family support groups, the Alzheimer's Program at Milwaukee's Mount Sinai Medical Center offers a four-week educational lecture series for families of Alzheimer's patients and the interested public. Covering topics from "What is Alzheimer's?" to "Placement in a Nursing Home," the series is held twice yearly.

The Houston-based ARA Living Centers, which operates 270 long-term care facilities and 20 Alzheimer's Care Centers, this year begin publishing the newsletter "Alzheimer's Caregiver." Featuring columns by physicians and other health care professionals, the quarterly publication offers practical advice for families and caregivers. Press Contact: Gillian Pines, 312/280-6129.

MAGICAL FORM OF TREATMENT OFFERED — Do you believe in magic? Physically and emotionally disabled patients at about 500 U.S. hospitals that participate in Project Magic do. Working with specially-trained volunteer magicians and occupational therapists (OTs), these patients learn to perform magic tricks that are as therapeutic as they are fun.

Magicians and OTs are trained to teach the tricks at special workshops, supplemented by an instructional

videotape and a how-to book which describes functional skills needed to perform each trick, therapeutic benefits, and techniques for adapting the tricks for patients with various disabilities.

Project Magic, launched in 1982, is the brainchild of world-renowned magician David Copperfield. As a boy, he discovered that magic helped him to overcome his shyness. He believed it could also be used to improve the self esteem of adolescents with psychological problems. When he discussed his idea with Julie

STEER YOUR MEETINGS ONTO A NEW COURSE



Have your meetings veered off track lately? Does brain storming stir up more dust than fresh ideas?

Hold your next mid-week meeting at the Sheraton Makaha. We're an hour and a world away from the pressures from downtown. Our meeting rooms can accommodate groups from 3 to 300 and our catering staff will supply the coffee and donuts, a "power brunch" or an executive picnic.

Wrap up your session with 18-holes of golf at Makaha's Sheraton West, or enjoy tennis or horseback riding. Discounted rates apply. And a hospitality room is provided for showers and changing.

So, pull your meetings out of their trap. We'll provide the setting for you to really drive home some great ideas.

Call 695-9511 for reservations.



**Sheraton Makaha
Resort & Country Club**

44 626 MAKAHA VALLEY ROAD
OAHU HAWAII 96792 808-695-9511
The hospitality people of **ITT**



Owned by ANA and operated by Sheraton

KOKUA

Since 1979, high standards of integrity and professionalism have enabled Kokua Nurses to become the top temporary medical placement company in Hawaii for nurses and para-professionals.

Kokua Nurses & Kokua HOME HEALTH AGENCY

Specialists in Private Duty Nursing,
Hospital and Office Staffing.
Licensed and Certified for
Medicare/Medicaid Reimbursement

RN'S • LPN'S • Nurses Aides
Medical Assistants
Travel Nurses • X-Ray &
Medical Technicians • Physical
& Occupational Therapists
Medical Social Workers
RN Supervision • Speech
Pathologists

Kokua Nurses

ON CALL 24 HOURS 536-2326
1210 Auahi Street



APPLICANTS WELCOME

DeJean, an OT at Daniel Freeman Hospital Medical Center, Inglewood, Calif., she immediately recognized that the physical skills and concentration needed to perform magic tricks could also help individuals with physical or mental disabilities.

DeJean now coordinates the program through a subsidiary of the Freeman Medical Center, while Copperfield remains involved by participating in training workshops, by visiting different program sites, and by plugging the program during public appearances. Hospitals in almost 20 countries, including Australia, Bangladesh, Canada, France, Great Britain, India, and Indonesia now use the program. Press Contact: Jan Shulman, 312/280-6349.

A HEALTHY HEADSTART FOR CHILDREN — Children in the community of South Bend, Ind., are off to a healthy start in life thanks to a program coordinated by Memorial Hospital. Known as "HealthStart" educational program. HealthStart offers primary care services to families who meet federal Medicaid guidelines for the poverty level.

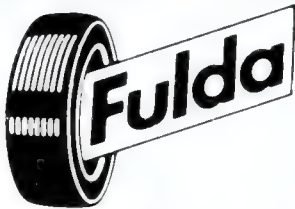
The hospital devised the program in 1985 when it realized that medically indigent children made up a large percentage of emergency room patients. By encouraging primary care and health promotion, the hospital hopes that children's health care needs will be met before a trip to the emergency room becomes necessary. HealthStart has been free of charge, but will switch to a sliding scale payment system in September due to escalating operational expenses. Most visits will cost about \$3.

Currently, HealthStart cares for nearly half of the 1,100 children in St. Joseph County. Medical services are provided by 12 private practice pediatric and family physicians on a volunteer basis; the hospital provides laboratory facilities and pharmacy services for the clinic.

HealthStart was originally funded with seed money from the State of Indiana, but is now privately supported. Similar clinics are offered by hospitals in many states, but Memorial's is unusual because its private funding allows it greater latitude in programming.

Also affiliated with the well-child clinic is a dental clinic, providing comprehensive dental care to children ages 3 to 18 whose families could not otherwise afford such care. Staffed by a pool of 60 volunteer dentists, the clinic currently serves approximately 1,000 patients. Press Contact: Andrea Mann, 312/280-6342.

ASK FOR THE SPECIAL DOCTOR DISCOUNT



RECARO

● BLAUPUNKT



AMG -KLASSE-



SUMMER CLEARANCE SALE

UP TO 30% OFF EVERYTHING IN STOCK!

WHEELS • TIRES • SEATS • STEREOs • CELLULAR PHONES
HUGE SELECTION OF THE HOTTEST ACCESSORIES!

100% FINANCING AVAILABLE OAC.

777 Kapiolani Blvd.
537-3975

Sale ends 9-30-87





O.P.T.I.O.N. Care of Hawaii

A Home IV and Nutritional Service

PRESCRIBE INTRAVENOUS HOME CARE!

If hospitalization is not absolutely necessary, let O.P.T.I.O.N. Care's experienced I.V. team assist you in providing your patients with a successful home therapy. O.P.T.I.O.N. Care's full-service program ensures cost-effective therapy and satisfied patients.

JOIN THE LEADERS . . .
PRESCRIBE O.P.T.I.O.N. CARE.

WE HAVE THE SOLUTION FOR YOU®

For More Information **CALL 254-5841**

Pali Palms • 970 N. Kalaheo Ave., Suite C-106 • Kailua, Hawaii 96734

STRICTER PRECAUTIONS AGAINST AIDS URGED—Chicago—All hospital workers should wear protective gear whenever there is the chance of exposure to blood or other body fluids, regardless of whether the fluids are known to be infected with the AIDS virus, the American Hospital Association recommended. AHA President Carol McCarthy said that this, rather than universal testing of all hospital patients, is the best precaution against the spread of AIDS to hospital workers and hospital patients.

McCarthy, while noting that the risk to hospital workers is low (there are only nine known cases), said "hospital workers are understandably concerned about their vulnerability." She added that there will be costs associated with the extra precautions, but that "if the transmission of AIDS to even one hospital worker is prevented it is worth the extra expenditure."

There are 3.6 million workers in the nation's hospitals, an estimated 80 percent of whom would be affected by the Association's new recommendation. Nurses and housekeepers, who comprise the two largest hospital departments, are among the hospital workers most likely to come in contact with blood and body fluids in the course of their daily jobs.

The AHA's recommendation states that "for every hospital, precautions must be strictly followed whenever there is a possibility of exposure to blood or other body fluids. All anticipated exposure requires the use of gloves. Some kinds of exposures may also require the use of gowns, masks, and eye coverings. Hands and other contaminated skin surfaces should be washed thoroughly and immediately if accidentally contaminated with blood or body fluids."

In addition to protecting health care workers from the risk of AIDS, the new guideline protects workers from hepatitis B, a blood-borne disease that is many times more contagious than the AIDS virus.

HMA 131ST ANNUAL SCIENTIFIC MEETING SET FOR NEXT MONTH—

To take place Oct. 9 through 11 at the Kauai Hilton and Beach Villas in Lihue, the meeting will feature the theme "Contemporary Medical Issues," and offer a variety of scientific and socioeconomic topics, including heart transplantation, hypertension, safety in blood transfusions, diabetes, peptic ulcer disease, and others.

A major portion of the meeting will be devoted to topics on alcoholism and chemical dependency and feature local,



CONTINUITY-OF-CARE™

24 HOURS A DAY

By combining your expertise and ours for complete patient care, our flexible Continuity-of-Care™ programs enable us to design the optimum home care program for you.

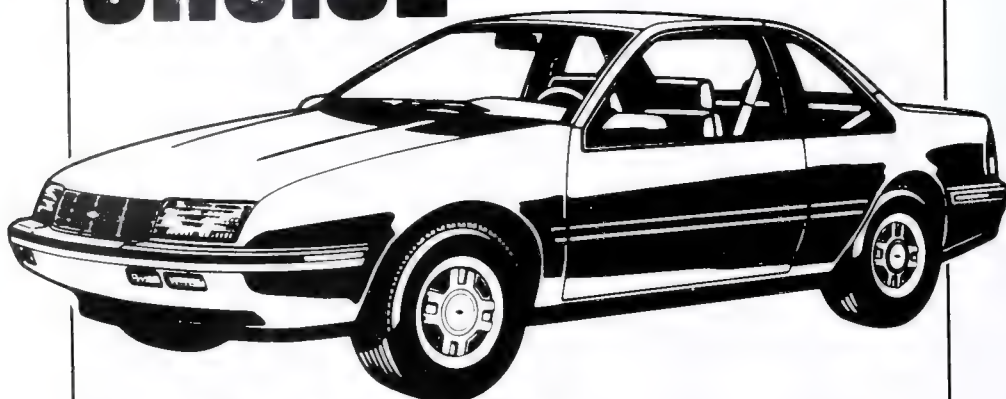
Hawaii's most complete homecare supplier



500 Ala Kawa Street
Honolulu, Hawaii 96817

845-5000

THE PROFESSIONAL CHOICE

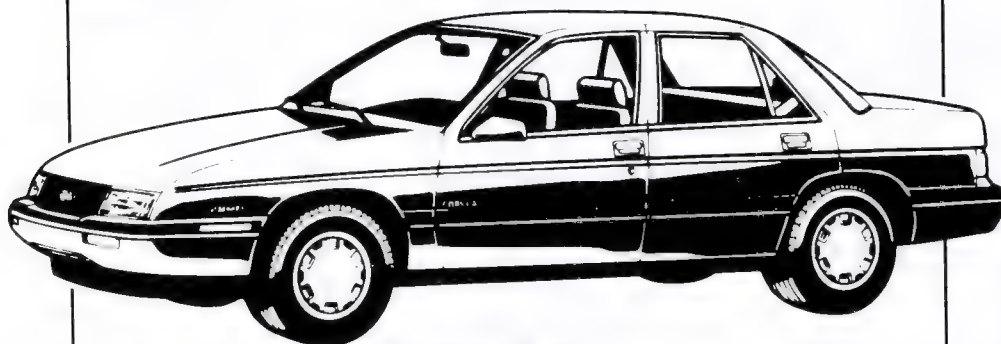


1988 BERETTA

- AERODYNAMIC SPORT DESIGN
- RESPONSIVE 2.0L L4 EFI ENGINE
- FULL ELECTRIC INSTRUMENTATION
- LUXURIOUS FABRICS AND TRIMS

THE 1988 BERETTA is "the right size and the right weight and has the right moves to do the job already," says Rich Cappos
—CAR and DRIVER February 1987

In "GM's Comeback Car," writer Greg Shisko compares the "hot new sports coupe" Beretta with the competition. "The Beretta's performance needs no apologies," he says.
—POPULAR SCIENCE February 1987



1988 CORSICA

- EXCELLENT VALUE FOR THE DOLLAR
- SPACIOUS 5 PASSENGER CAPACITY
- FRONT AND REAR 3 POINT SAFETY BELTS
- DEPENDABLE 2.0L L4 EFI ENGINE

"General Motors engineering officials have delivered on an important promise. They said these cars would show levels of fit and finish approaching Japanese levels and they do."
—AutoWeek January 5, 1987

The 4-cylinder Chevrolet Corsica/Beretta gets Home Mechanix's nod as the easy-maintenance car of the year, despite electronic wizardry and a host of high-tech features."
—HOME MECHANIX May 1987

national, and international speakers. Dr. Rudolf Mader, Chief of the Anton Proksch Institute in Austria, will headline the faculty now being assembled for these sessions.

For more information, contact the Hawaii Medical Association at 536-7702.

PNEUMOCOCCAL AND INFLUENZA VACCINATION IS BEING STRESSED BY THE DEPARTMENT OF HEALTH—Particular emphasis is being placed on persons 65 and over, as well as younger persons at risk due to chronic disease. Although all the adult immunizations are of concern to the DOH, special attention is being given to the promotion of pneumococcal vaccination. Pneumonia is the fourth leading cause of death in Hawaii, and it is estimated that between 10% and 35% of all pneumonias are pneumococcal.

The pneumococcal vaccine is a 23-valent capsular polysaccharide for subcutaneous or intramuscular injection. First licensed in 1977, it has an established efficacy of 60% to 80% in healthy adults. Efficacy does not decrease with age. Some studies suggest that the efficacy may be diminished in chronic disease. However, vaccination is still recommended for such individuals in view of their increased risk.

The U.S. Public Health Service's Advisory Committee on Immunization Practices (ACIP) recommends a single lifetime immunization with pneumococcal vaccine for all persons age 65 and over, and for younger persons with chronic illnesses associated with an increased risk for pneumococcal disease or its complications. The same groups are recommended for yearly influenza vaccine.

It has been estimated nationally that less than 20% of the target group have been vaccinated for pneumococcal disease. Based on records of vaccine shipments into the state, the Department of Health estimates a similar figure for Hawaii.

DOH efforts to increase the level of immunization coverage consist largely of public health education messages designed to create a public demand for the vaccine. In addition, physicians and clinics are being urged to offer the vaccine to high-risk patients.

Professional literature for physicians — including a detailed annotated bibliography — and brochures for the general public on pneumococcal and other adult immunizations are available from the DOH at 548-5986. The DOH is also supplying physicians and clinics with lifelong immunization record cards and vaccine information statements.

WAIPAHU AUTO CHEVROLET

94-729 FARRINGTON HWY

Ph: 671-2871



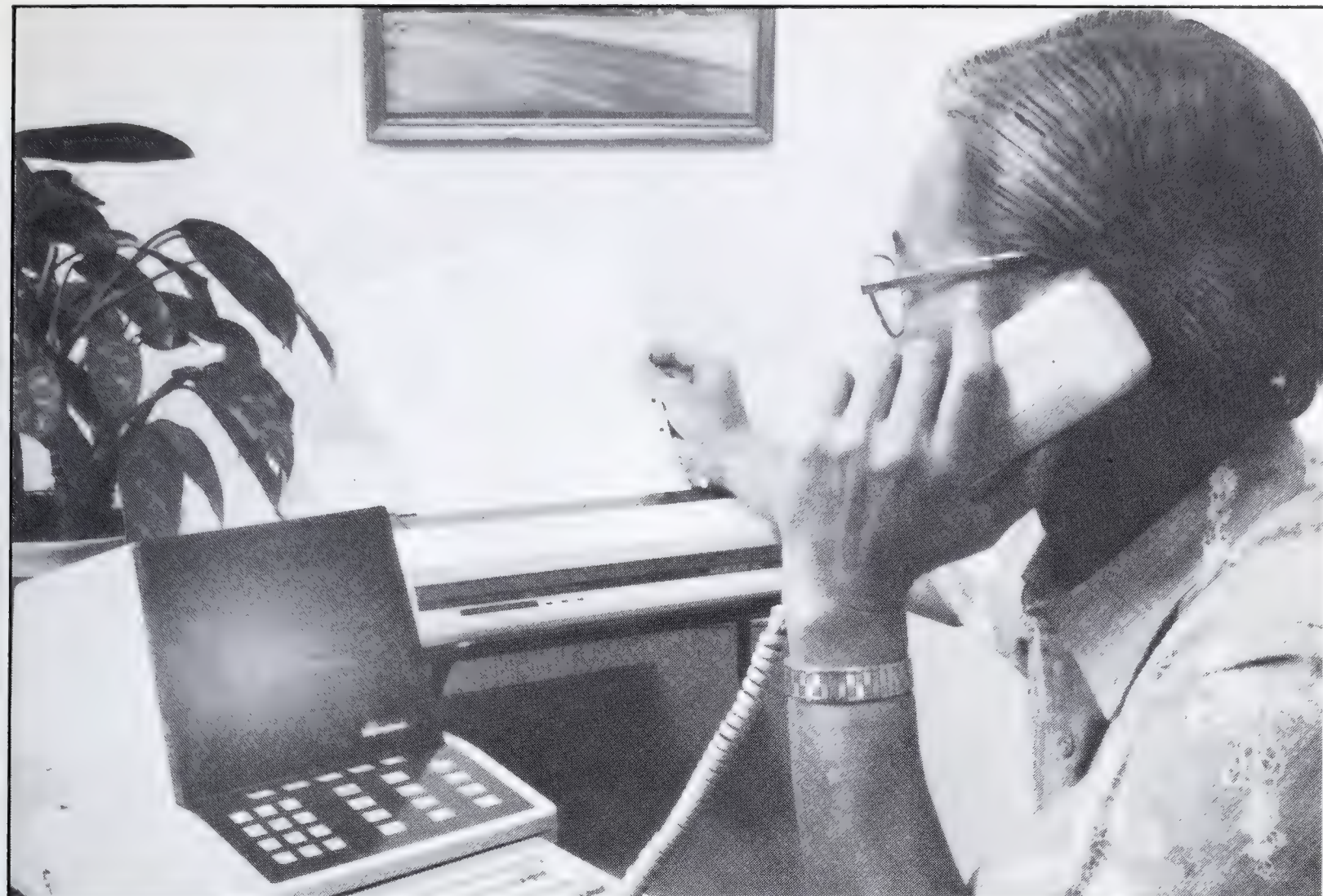
A Division of Servco Pacific Inc.

WAHIAWA SERVICE MOTOR CO.

105 KAMEHAMEHA HIGHWAY, WAHIAWA

Ph: 622-4195

SUNAR MILL	
WAIPAHU ST	
ARAKAWAS	
HONFED	TIMES
FARRINGTON HWY	
WAIPAHU DEPOT	
WAIPAHU CHEVY	



As Hawaii's own independent clinical laboratory,

Diagnostic Laboratory Services serves you and your patients with advanced computerized technologies for maximum reliability and efficiency. **DLS** provides a broad scope of high quality lab services at a reasonable cost. **DLS** offers physicians and hospitals the latest information systems to enhance their practices and benefit their patients.

Creative physicians today use innovative supporting services to the advantage of their patients and practices. With our skilled staff, state-of-the-art instrumentation, and centralized computer system, we can assist you in providing your patients better medical care.

Networking

DLS offers physicians and hospitals the opportunity to utilize LABNET, a new dimension in laboratory services: an on line computerized information system allowing you immediate access, 24 hours a day, to comprehensive clinical information while simultaneously protecting its security and confidentiality.

Centralized Computer System

DLS is computerized from the moment patient information and specimens are registered to the final delivery of results to your office by courier or LABNET. For the extra protection of your patients, our computer highlights all significant abnormal test results, alerting our Client Service Department to call your office.

Additional Services

- Automated Hematology
- Multi Channel Chemistry Analyzer
- Broad Range of In-House Esoteric Testing
- Disease Oriented Profiles
- Flexible Billing
- HMSA Assignment Accepted

Put us to the test.

 **Diagnostic
Laboratory
Services INC.**

523-7061



It's always there when you need it.

Whether you're putting the kids through school, paying medical bills, starting a family, or planning a vacation, you can always count on First Hawaiian's Equity FirstLine of Credit.SM

Whenever you need FirstLine, all you have to do is write a check. And since it's secured against your equity in real estate, FirstLine's interest rate is a lot lower than ordinary personal loans. Plus,

there are no points to pay. And few, if any, closing costs.

For more information, just visit any branch of First Hawaiian Bank. Like FirstLine of Credit, we're always here when you need us.



FIRST HAWAIIAN BANK
We say yes to you.

Member FDIC



OCTOBER 1987
VOL. 46, NO. 10

Hawaii MEDICAL JOURNAL

Hawaii medical journal
UCSF LIBRARY
Received on: 11-12-87

CONTENTS

FROM THE PRESIDENT 370

Walter W.Y. Chang, MD

EDITORIALS: 371

AT QUEEN'S 125TH

J.I. Frederick Reppun, MD

ABUSE OF THE PHYSICIAN

Russell T. Stodd, MD

LETTERS TO THE EDITOR 372

Re: Osteoporosis

FROM THE DIRECTOR OF HEALTH 375

John C. Lewin, MD

TRAUMATIC AORTO-PULMONARY ARTERY FISTULA 379

Jeffrey M. Lau, MD

Steven Swartz, MD

Mark Grief, MD

RESECTION OF RUPTURED ABDOMINAL AORTIC 383

ANEURYSMS IN ST. PETERSBURG, FLORIDA

Kirk M. Landau, MD

Scott Cassidy, MD

Richard G. Norenberg, MD

HMA TESTIMONY TO SENATE JUDICIARY 385

COMMITTEE ON MEDICAL MALPRACTICE

INSURANCE, JULY 1987

CONTINUING MEDICAL EDUCATION 389

NEWS & NOTES 396

Henry Yokoyama, MD

OVER THE EDITOR'S DESK 398

Stephen R.P.K. Brady, MD



AT LAST.

A cure for the high cost of medical malpractice coverage.



The Hawaii Association of Physicians for Indemnification (HAPI) offers a doctor owned, tax-deductible malpractice protection plan to qualified physicians and surgeons practicing in the state of Hawaii.

HAPI's Physicians' Indemnity Plan (PIP) can provide you with \$1,000,000 of medical malpractice coverage.

Our 350 physician-members agree that PIP has decreased their annual medical malpractice costs up to 75 percent.

Let us help you with your medical malpractice concerns. Contact us today for more information. It's good to have a choice . . . It's great to make the right one.

Norman J. Slaustas
Administrator, HAPI and PIP
735 Bishop Street, Suite 311
Honolulu, Hawaii 96813
(808) 538-1908

PIP
Physicians' Indemnity Plan
HAPI
Hawaii Association of
Physicians for Indemnification



HAWAII MEDICAL JOURNAL

(USPS 237-640)

Published Monthly for the

HAWAII MEDICAL ASSOCIATION
(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD

Founding Editor: HARRY L. ARNOLD JR., MD

News Editor: HENRY N. YOKOYAMA, MD

Assistant Editor and Book Review Editor:

DOUGLAS G. MASSEY, MD

Contributing Editors: STEPHEN R.P.K. BRADY, MD,

FRANCIS H. FUKUNAGA, MD,

Managing Editor: CHARLOTTE BEAL

Editorial Assistants: BECKY KENDRO

Copy Editor: GWENDOLYN CHANG HULLEMAN

Graphic Artist: J. CHARLES DAVIS

Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,

THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,

JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD

(Commissioner)

HENRY N. YOKOYAMA, MD

(Chairman)

STEPHEN R.P.K. BRADY, MD,

NATHANIEL P.H. CHING, MD,

FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,

JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,

JAMES P. MCGUIRE, MD,

DAMKERNG PATHOMVANICH, MD,

ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,

J.I. FREDERICK REPPUN, MD,

TERRY C.Y. WONG, MD,

SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD

President-Elect: JAMES LUMENG, MD

Past President: RUSSELL T. STODD, MD

Secretary: JOHN H.C. KIM, MD

Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD

Honolulu: JOHN T. McDONNELL, MD

Kauai: THOMAS GROLLMAN, MD

Maui: HELEN S. PERCY, MD

West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD

CALVIN C.M. KAM, MD

Alternate Delegates to AMA

WALTER W.Y. CHANG, MD

RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.

Post Office Box 833

Honolulu, Hawaii 96808

Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.

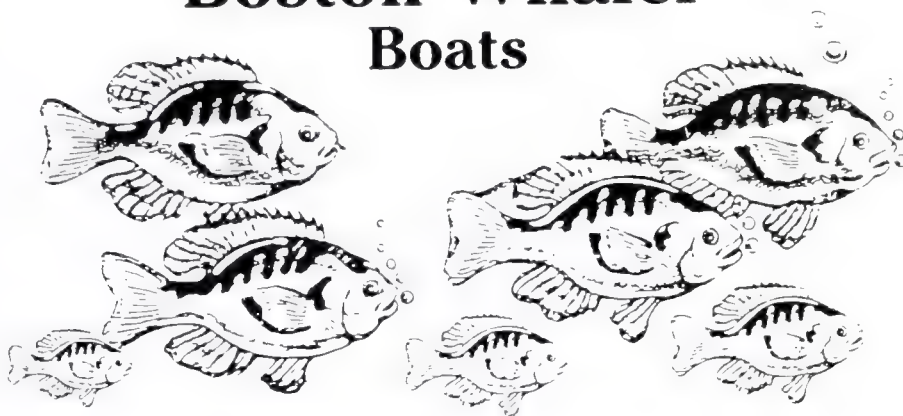
16 Bruce Park Avenue

Greenwich, Connecticut 06830

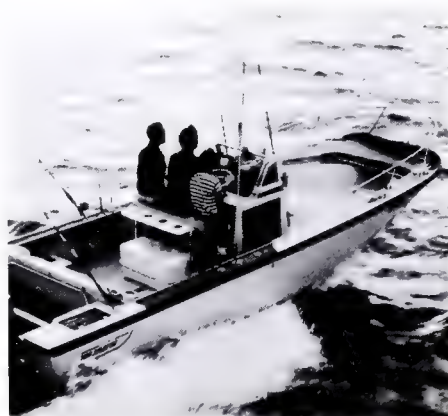
Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.

In Some Schools Boston Whaler Boats



Have Become Very Unpopular.



THAT'S WHAT MAKES THEM SO POPULAR WITH FISHERMEN.

No one has taken more fishermen to more fish longer than Boston Whaler. It not only exceeds Coast Guard flotation specifications by multiples, it's unsinkable, incredibly durable, and backed with a 10 year warranty.

Why don't you go for the best?

Safety is important to you, isn't it?

Come in today and see for yourself.

McWAYNE MARINE SUPPLY

1125 Ala Moana Blvd./Honolulu, Hawaii 96814 Hours: Mon.-Sat. 9 am-6 pm, Sun. 9 am-5 pm

AT KEWALO BASIN PHONE: 524-6150

A DIVISION OF SERVCO PACIFIC INC.

FROM THE PRESIDENT

*Home is the sailor, home from the sea
And the hunter from the hill —*

With these closing lines from Robert Louis Stevenson, it is also the close of my year of stewardship as your association president. The year has been a most enjoyable and gratifying one and I wish to thank all of you for allowing me the privilege of serving you.

As stated in my inaugural message, the future home for the Association was the paramount issue for this year. The HMA Development Co. under the aegis of Jim Lumeng, Allen Kunitomo, Bill Hindle, Elmer Johnson, and John Kim worked diligently and unstintingly and was able to raise over \$1.3 million. The building is rapidly taking shape and we hope to move in after the annual meeting in October. Nelson Jones has been the invaluable staff administrative assistant who has coordinated all aspects of the building program.

Renewed interest in tort reform has just begun to build up steam with Sen. Clayton Hee's recent hearings. We hope we will be able to accomplish a little more in the next legislative session. A non-economic cap would be the single most desirable objective, with joint and several liability and collateral sources second and third. The specialty societies were involved in the effort and also HAMPAC. We will continue all efforts next year. Becky

Kendro, Ray Higa, Richard Lundborg and Charlie Ushijima spearheaded our legislative efforts.

MIEC's 41% surcharge increase on top of a 25% step increase that has been scheduled stirred up a hornet's nest, culminating in the medical malpractice insurance hearings by Chairman Hee. We are continuing our dialogue with him and also with the Federation and the Ob/Gyn society. More competitiveness may result from these proceedings but we may also see more emphasis on risk management courses for physicians, as well as more stringent policing of and by the physicians.

We now have over 154 AIDS patients in Hawaii, with over 75 deaths. The Association with the cooperation of the Board of Health and of the Board of Education will try to coordinate and lead efforts in the education about, and containment of, this modern scourge.

Lastly, all this could not have been possible without the kokua of our executive director Jon Won, his assistant executive directors Becky Kendro and Nelson Jones and their staff, including Jennie, Charlotte, Ray, Pat, Joella, Marilyn, Diane, Cheryl, Susan, Lorraine, Judi, Angela and Karen.

In closing, I wish incoming president Dr. James Lumeng all the best during his 1987-88 term.

Walter W.Y. Chang, MD
President
Hawaii Medical Association



Once upon a time, this was considered a luxury.

If you're a busy executive, cellular phone service from Hawaiian Tel is no longer a luxury. It's a necessity.

Cellular is the most important business communications breakthrough since the advent of the telephone itself. It lets you make and receive calls from almost anywhere. So while others are on the road, you can be on the phone.

Besides the obvious business advantages, cellular service from Hawaiian Tel is backed by 104 years of local knowledge, and the nationwide cellular expertise of GTE Mobilnet.



At Queen's 125th

Two articles in this issue of the JOURNAL, "Traumatic Aorto-Pulmonary Artery Fistula" and "Resection of Ruptured Abdominal Aortic Aneurysms," were presented at the Queen's Hospital celebration of the 125th anniversary of its founding, which took place recently in Honolulu. We are pleased to publish them in the JOURNAL since they represent not only what our community learns from visiting lecturers, but also what our people can and do contribute to the advancement of medical/surgical knowledge in Hawaii.

The first article is by local thoracic and cardiovascular surgeon Jeffrey M. Lau and two of his surgical residents from the Department of Surgery, UHSM. The second is by former surgical resident Richard G. Norenberg, who was in the same Honolulu residency program and now practices in St. Petersburg, Fla. Dr. Norenberg introduced his own paper with some remarks about returning to Hawaii.

J.I. Frederick Reppun, MD
Editor

Abuse of the Physician

(Guest editorial)

Very recently, Carol A. Brown, MD, an active member of the Hawaii Medical Association and a psychiatrist in private practice in Hawaii, was acquitted of numerous charges filed against her by the Medicaid Fraud Control Unit. In particular, Dr. Brown was accused by Deputy Attorney General Peter L. Yee of multiple counts of fraudulent billing. It was understood that the services had been provided, that the patients had been cared for and that no complaint was made of medical negligence.

One must recognize at this point, that the accusations were of a criminal nature, meaning that Dr. Brown was alleged to have committed multiple felonies. Her medical liability insurance did not cover such complaints, therefore all expenses of defense were paid out of her own pocket. Expenses on the other side were paid by State and federal taxpayers.

The physician was deeply hurt, wrongfully accused and completely alone. Like nearly all of us practicing medicine, she was



So was this.

So if effective communication is important to your company, dial 732-9500 and ask about cellular phone service from Hawaiian Tel. It's everything your business could call for.

HAWAIIAN TEL GTE
Beyond the call



An authorized agent of

Mobilnet®

Cellular Communications



not prepared to defend herself against a charge of criminal administrative malpractice.

Take a moment to look at the next Medicaid billing form that crosses your desk for signature. It reads: "I certify that the foregoing information is true, accurate and complete." What busy medical practitioner has not unknowingly signed such a form, prepared by the secretarial staff, which was only partly true or less than completely accurate? In fact, it is almost surely true that *ALL* of us have committed such a transgression on at least one occasion.

Is that fraud? Does that make us criminals? Apparently, in the eyes of the Medicaid Fraud Control Unit, the answer is yes. Dr. Brown, or any of the rest of us, may stand accused of criminal intent when we sign an erroneous Medicaid claim form.

In Dr. Brown's case the Deputy Attorney General was willing to plea-bargain. The doctor would pay a financial penalty, stand adjudicated guilty and be allowed to return to her practice, appropriately chastised. One cannot call this extortion; obviously, the State would not do such a thing.

Yet, if Dr. Brown decided, for reasons of conscience, to contest these criminal allegations, she risked felony conviction with all attendant impediments, as well as possible loss of license to practice her chosen profession. Furthermore, even if she should be totally acquitted of wrongdoing (as she subsequently was), she would incur very substantial legal expenses, not to mention loss of income, and possible loss of esteem by her patients and colleagues. (In English literature it is called Hobson's choice, which is no choice at all. Choose between the rock and the maelstrom. You can go to jail if you lose, or go broke if you win.)

In an effort to avoid the tribulation of a felony trial, or a lesser crime, namely plea-bargaining, Dr. Brown's attorney offered to submit the problem to binding arbitration, and Dr. Brown was prepared to make financial restitution if deemed appropriate. However, the Deputy Attorney General was not interested. He was apparently certain of a conviction.

All of us practicing medicine in Hawaii owe Carol Brown a debt of gratitude. She chose to fight what she believed to be an unfair, unjust criminal complaint brought against her by a government agency with unlimited resources. She acknowledged the possibility of disagreement regarding billings, and was willing to discuss repayment of disputed claims. She was not willing to admit fraud, and she refused to pay tribute and stand convicted of a lesser charge. Call it what you will: Courage, backbone, pugnacity, defiance, grit, valor, tenacity — whatever — it took guts!

She stood up to the faceless, nameless Medicaid Fraud Control Unit and said: "I will not let you call me a criminal." After a prolonged and painful period, the issue came to trial where a learned jurist acquitted her on all counts.

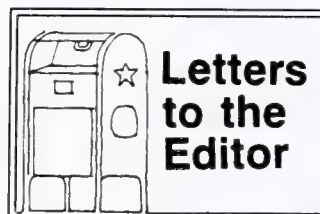
What price did Dr. Brown have to pay for her victory? The financial cost ran to an enormous \$60,000, but try to imagine the psychological trauma. Months of stress went by with letters, interviews, depositions and counseling. She endured countless nights of insomnia, loss of appetite, strained job performance, and a foreboding specter of losing everything — profession, savings, future income and self-esteem.

We are practicing medicine in what is becoming more and more of a pressure-cooker. By definition, American physicians are independent thinkers, scientifically objective and proud of our ability to observe, evaluate, act and cure. Our own government, through mindless, amoral agencies, would turn patients into ciphers and doctors into numeralized puppets. The alphabet soup is a litany of omnipresent regulatory agencies — IRS, PRO, HCFA, FTC, FDA, SSA, DEA, not to forget our local

DCCA and RICO — all created for the benefit of the people. Yet, as is well known, the greatest social evils always arise from the very best of reasons.

As thinking, caring physicians, concerned for the freedom of our patients and for ourselves, we have a duty and obligation to confront the megalith when it runs amok. Carol Brown did, and she won a battle for all of us.

Russell T. Stodd, MD



Re: Osteoporosis

I would like to take exception to your comments in your Editorial on "Osteoporosis" in the June 1987 issue.

Over one-half million vertebral fractures and a quarter of a million proximal femoral fractures occur yearly according to Kelsey (Proceedings of the NIH Consensus Development Conference, page 25-28, April 2-4, 1987). By actuarial analysis, it is predicted that by extreme old age, one in every three women and one in every six men will have sustained a fracture of the proximal femur with an adverse financial impact of \$6.1 billion annually, based upon papers by Riggs and Melton (NEJM, vol. 314, p. 1676, 1986), and by Holbrook et al in a paper presented to the American Academy of Orthopedic Surgery in Chicago in 1984. There is little question that a weight-bearing exercise program improves bone mineral content as described by Margulies et al (Journal of Bone and Joint Surgery, 68A: 1090, 1986). In addition, there are other risk factors such as cigarette smoking, caffeine, alcohol, etc. that adversely affect bone metabolism. However, exercise of and by itself will *not* prevent osteoporosis in everyone.

There are a lot of papers supporting this position.

Thank you for your efforts in behalf of the JOURNAL, and I am sorry that I disagree with you on this one point.

Lawrence H. Gordon, MD

The JOURNAL appreciates the comment by Dr. Gordon as an indication that (a) the JOURNAL is being read and (b) the provocative editorial served to point up the controversy that exists over the multifactorial etiology of osteoporosis.

Our design was to denigrate the pharmaceutical push to advertise and push calcium as if it alone "will prevent or even cure osteoporosis." We are also reluctant to promote endocrine therapy for every asymptomatic woman post-menopause, as if there is no other therapy as effective.

—Editor

Correction

In the July 1987 issue of the JOURNAL, primary author for "Behavioral Treatment of Palmar Hyperhidrosis" is William T. Tsushima, PhD. We apologize for the typographical error in Dr. Tsushima's name, which occurred once in the index on the cover, and again in the article's heading.

—Editor

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA **Professional** **Relations** **Department**

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo)
	329-5291 (Kailua-Kona)

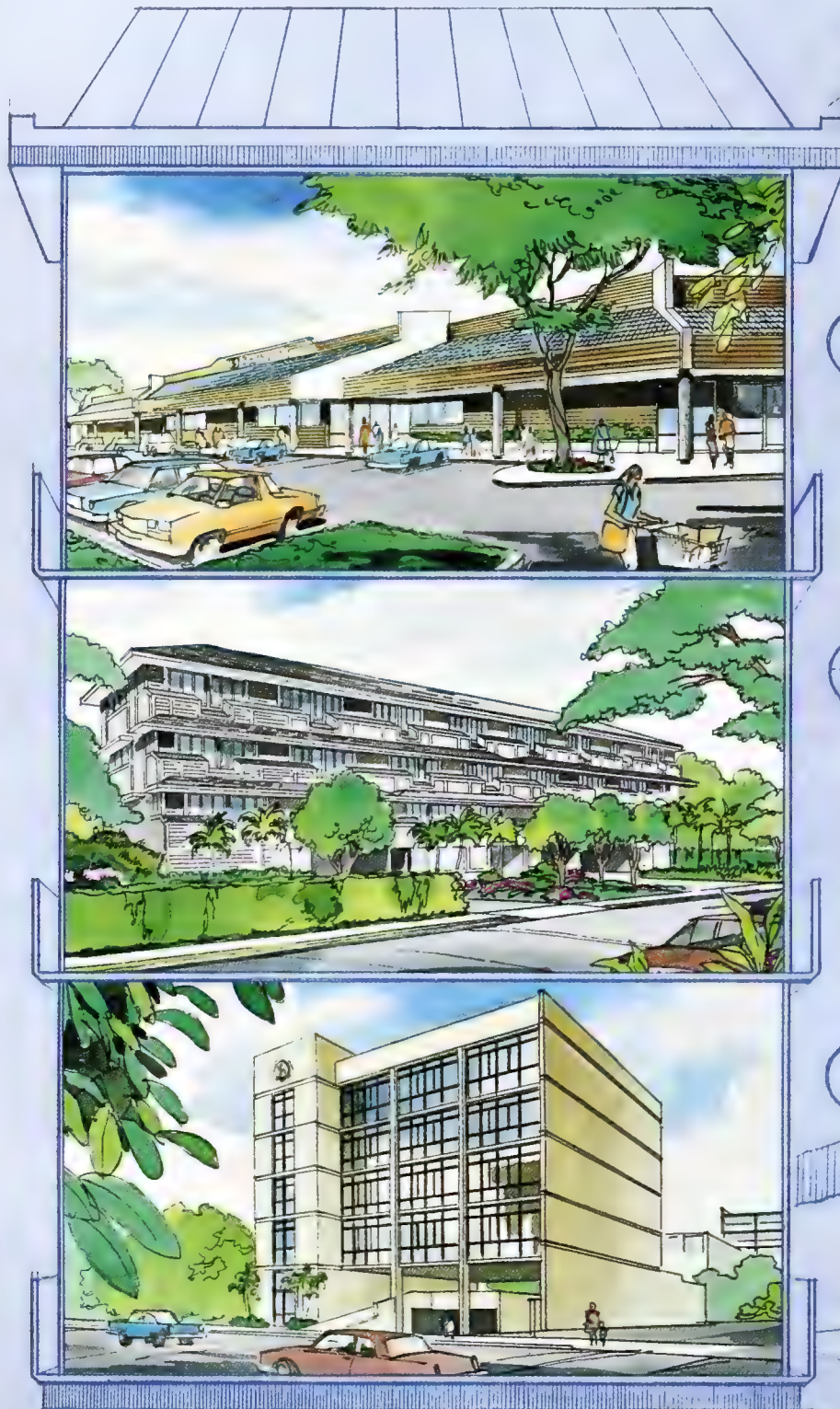
HMSA's Place of Treatment Program
saves your patients money.
Call us for details.

SUCCESS STORIES

Every commercial project has a different story. There are 50-story towers. And 1-story office buildings.

But when it comes to financing, some things remain constant. Like First Interstate Bank. You can always count on us for personal service. Flexible terms. Competitive rates. Quick approvals. And, we can draw on the strength of First Interstate Bancorp.

For more information, call Robert Okubo at 525-7837, or Jim Wayman at 525-7815. In the meantime, take a look at a few of our success stories.



1. Windward Town & Country Plaza Shopping Center, with 55,000 square feet of leaseable area. The project has been appraised for \$8,135,000.

2. The Residence at Punahou, a condominium project consisting of 19 two-bedroom and 4 one-bedroom units. The project has been appraised at \$2,432,000.

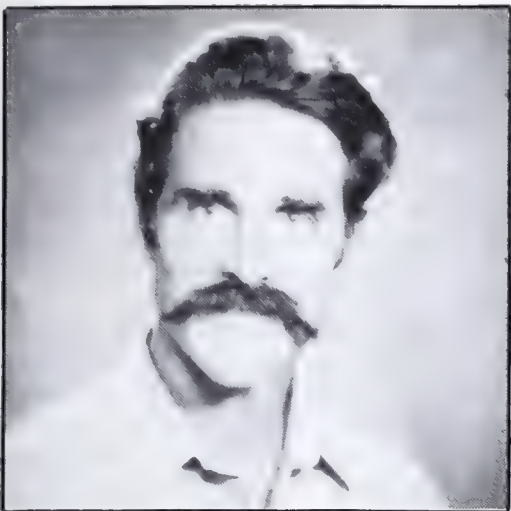
3. Hawaii Medical Association Building, a 22,400 square foot, four-story office building. The property has been appraised at \$3,260,000.



EQUAL HOUSING
LENDER

 **First
Interstate**
Bank

MEMBER FDIC



FROM THE DIRECTOR OF HEALTH

Physicians Play Crucial Role in Fight Against AIDS

By mid-1987, Hawaii had 154 diagnosed cases of AIDS with 75 deaths. These figures do not reflect the additional impact of those cases who migrated here from other states, the estimated tenfold number of ARC cases, or the 5,000-6,000 HIV positive cases in Hawaii. It has been estimated by the Centers for Disease Control (CDC) that by 1991, Hawaii will have a total of almost 1,790 cases of AIDS. This estimate may be low since it is based on the notion that at least 20% of those already infected will develop frank AIDS within the next five years.

Many investigators feel that more than 50% of the infected will develop frank AIDS in that time period, meaning that Hawaii could have 3,000 frank AIDS cases by 1991.

Over the past year, the Department of Health (DOH) has tested more than 5,000 individuals for the HIV antibody test and 5% have been positive.

Cumulatively, we have detected more than 600 AIDS-positive individuals since 1985, and another estimated 400 to 500 have probably also been diagnosed through their private physicians. Thus, perhaps only 1,000 of the 5,000 to 6,000 estimated infected individuals in Hawaii are aware of their condition. In order to curb this growing AIDS epidemic in Hawaii, a comprehensive, coordinated response is necessary from health care providers, government agencies, community-based organizations and society as a whole.

Health care providers need to assess the latest research and public health/clinical recommendations to provide optimum care for their patients while protecting themselves from infection. Lawmakers must assimilate new knowledge so as to provide the citizenry with services and protection through legislation. Community-based services need enhancement. The public must be properly educated so as to quell misdirected fears and take adequate steps to protect itself from a disease with no medical cure.

Of great importance to me is the leadership role that the DOH must take in order to make this coordinated response a reality. I believe that education, information, counseling, testing, and other diagnostic and treatment services must be made available to every person in Hawaii.

At the present time, the Communicable Disease Division at

the DOH is involved in AIDS prevention and control through the following activities:

1—AIDS surveillance and case reporting.

2—AIDS education, which involves distribution of health education material, DOH/Department of Education AIDS curriculum development, presentations, and information and referral services.

3—AIDS counseling and testing services at Diamond Head Health Center and other outreach centers.

I plan to expand greatly the current program through a reorganization of the division, which will result in the development of an AIDS/STD Branch. This branch will be headed by a physician administrator and will expand activities to include epidemiology prevalence research, community liaison and consultation, public relations, legislative planning, and appropriate clinical services.

In the clinical and research areas, I am particularly enthusiastic about some new services the AIDS Program will be offering. All HIV-positive individuals seen in our AIDS clinics will be offered a TB skin test. The clinic staff will also be actively involved in assisting these HIV-positive individuals to find a caring primary care physician (PMD). The AIDS program, through my office, has been awarded \$151,450 to provide AZT to indigent patients. In addition, I plan to initiate clinical drug trials for HIV-positive patients through these PMDs.

In the Epidemiology Surveillance and research areas, the AIDS program recently hired an epidemiologist whose responsibilities include analysis of HIV testing data, receiving reports of AIDS cases, and assisting physicians in determining AIDS and ARC cases according to CDC criteria. The 1987 legislature provided funding to DOH for research on the prevalence of HIV infection in certain groups, such as the prison population, the prostitutes and transvestites, young heterosexuals, and in-hospital patients. These studies are scheduled to begin in September 1987.

I anticipate that the DOH Laboratory Branch will expand HIV-antibody testing by January 1988. I plan to offer free testing outside of the AIDS Program clinics to private physicians. Thus, the private physician will have the option of

referring patients to DOH counseling and testing clinics or directly submitting blood samples for HIV antibody testing.

In September I will reconvene the DOH AIDS Task Force. This group will consist of members from all divisions in DOH as well as from the professional community. They will advise me on areas outside the purview of the AIDS Program such as AIDS cases in the school, insurance issues, workers' compensation, Medicaid-waiver system, quarantine guidelines, infection control recommendations, and long-term care for AIDS patients.

During the 1987 Legislative Session eight "AIDS bills" were passed into law. I would like to share the context of these measures with the readers of the JOURNAL.

HB 889: This bill amends the confidentiality provisions of HRS Sec. 325-101, which became law July 1986. The confidentiality of records and information concerning conditions and testing of a sexually transmitted disease is specified. The information is not subject to subpoena. The provisions for the release of such data to specified agencies such as the DOH, blood banks, plasma centers, organ and tissue banks, schools and day-care centers are delineated. The recording of protected information in a separate portion of an individual's file marked confidential shall not constitute a breach of confidentiality. No individual is required to consent to release confidential information to obtain or maintain housing, employment, or education.

SB 993: Reports to the DOH of persons who had or have diseases transmissible by blood or blood products may be provided by the Department to any blood bank so that the individuals may be rejected as donors.

SB 994: An amendment to HRS Sec. 325-1 deletes the statutory list of communicable diseases and enables the Director of Health to adopt rules to declare diseases or conditions to be communicable or dangerous. Laboratory directors and all health care professionals are included among those required to report communicable or dangerous diseases or conditions.

SB 1007: The conditions under which informed written consent for HIV antibody testing must be obtained are delineated. Informed written consent must be obtained except for the following situations: The use of anatomical gifts for scientific purposes; research to test for HIV infection, so long as the test subject's identity is not known; anonymous testing provided by the DOH, provided that verbal consent is obtained; testing of body fluids or tissue ordered by a third party when the third party has obtained the informed written consent of the tested person allowing the release of test results to the third party; testing carried out when the health and safety of the client or health worker is in "imminent jeopardy" due to blood and body fluid exposure from an individual suspected of HIV infection. Confidentiality of records is assured and a fine of \$1,000 to \$10,000 is levied for failure to obey these rules.

SB 1126: The DOH or its marriage license agents are required to furnish information on fetal alcohol and drug syndromes, AIDS, and the availability of anonymous HIV antibody testing sites.

SB 830: HIV infection is added to the preclusions of discriminatory practice in any real estate transaction. Testing for HIV infection is prohibited as a condition of any real estate transaction.

SB 833: No insurance firm can refuse to insure, cease to insure, or limit coverage because an individual has taken an HIV test prior to applying for insurance, or because an individual refuses to consent to the release of confidential information, unless the insurer obtains and uses the results of a test that will justify the requirement of the insurance commissioner, which test was taken with the consent of the insurance applicant. The

insurance commissioner is required to adopt rules regulating the use of tests for AIDS and for the presence of HIV antibody. The bill includes a repeal date of two years after its approval.

Appropriations directed at AIDS projects from the 1987 legislature include the following: \$130,091 each fiscal year (FY), 1987-88 and 1988-89, for purchase of service earmarked by the DOH for the Life Foundation; \$147,984 in FY 1987-88 for an AIDS interim student awareness program for secondary schools within the public school system, and \$200,000 for AIDS epidemiologic studies for FY 1987-88.

I am committed to mobilizing the resources and person power of the DOH effectively to meet the challenge of the AIDS epidemic. Cooperating with the medical community to achieve the State's goals of promoting health and, specifically, preventing the spread of the life-threatening disease AIDS, is one of my highest priorities. The HMA is creating an AIDS advisory group to DOH presently and the HMA president is likely to be a member of the governor's new AIDS Commission.

Finally, I am appalled at how long it will take the FDA and the NIH to release promising drugs and vaccines for use in HIV-infected individuals. AZT is not a very promising drug, given its marrow toxicity. I am therefore working to have Hawaii become a satellite center to one of the 16 nationally designed AIDS Treatment Evaluation Units (ATEUs), so that our patients here have at least the option of participating in clinical trials. Some new therapies appear more promising than CDC or NIH are openly willing to acknowledge, yet they will not be available to any physicians in Hawaii for three to five years. Our patients cannot simply relocate near an ATEU, and the cost of health care for a possible 3,000 frank AIDS cases in 1991 to 1992 could cost more than \$100 million per year. This is not to mention the terrible human suffering and loss of productivity that will occur if we do not use all available measures necessary to prevent progression of our AIDS-infected population from virus positivity to frank AIDS. The implications internationally and in the Third World could precipitate an unthinkable economic, social and political catastrophe.

Thus, although education regarding the 100% preventability of AIDS is our first priority, research and clinical drug trials are necessary and must be approached in more heroic ways than the federal government appears to be moving toward, despite the amazing pace of research in the past five years.

I am asking each physician in Hawaii to assist his or her present AIDS patients to become eligible for future medical therapies, and perhaps clinical trials if necessary, by being tested and monitored. The DOH should be informed about *all* HIV-infected individuals to be able to plan for financing and care, to assess the spread of infection accurately, and to be able to offer *help* to those infected through future options to participate in clinical trials. We do *NOT* want to know the patients' names. In order to protect confidentiality, we will need only a code identifier, the clinical data, and the treating physician, with respect to each infected person. This will enable us to develop the first statewide "cohort" of patients and allow all of the above options to become possible.

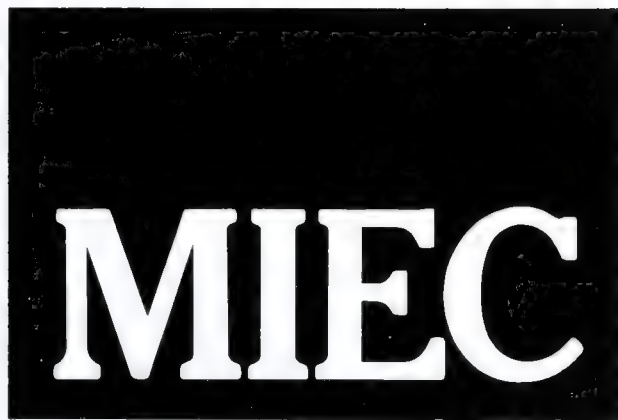
For further information please contact:

Communicable Disease Division, AIDS Program

- Christine Nevin-Woods, DO, MPH 548-4580
Acting Division Chief
- Alan Katz MD, MPH 524-4899/548-4580
Administrative Assistant, AZT Program Coordinator,
Clinical Research Contact

(Continued on page 395)

**Strong.
Sensible.
Sound.**



Medical Insurance Exchange of California

Professional Liability Insurance Exclusively.

Sponsored by Hawaii Medical Association.

6250 Claremont Avenue, Oakland, California 94618-1324

Telephone (415) 428-9411, outside California (800) 227-4527

Or call Hawaii Medical Association, 536-7702

And you own it.

IS YOUR FINANCIAL FUTURE A PUZZLE?

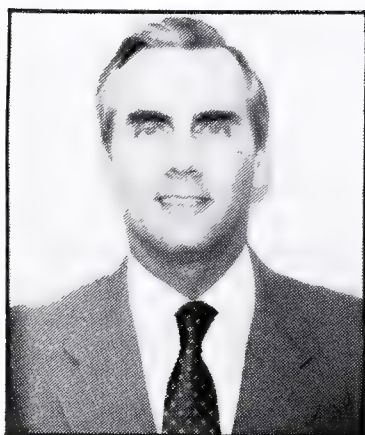
MONEY Financial Planning, Inc. Can Help You Put The Pieces In Place!

Our financial planning system starts with a thorough analysis of your personal financial situation. From your financial input, we produce an easy to understand, personalized financial plan. This plan is a living document, designed to be used by you and others involved in your financial affairs—your banker, accountant, attorney—to plan your financial future.

With this detailed profile in hand you will be in a position to make more informed decisions regarding steps to be taken to meet your financial goals. And you will have an experienced financial planner to advise you regarding the types of products and services which can put your money to work for you.

Where do you begin?

Our professional financial planning services begin with a completely confidential, no-obligation initial interview that allows you to determine if our services are appropriate for you. To schedule an initial interview, call MONEY Financial Planning, Inc., 536-6977 and ask for Brandon Weathers, CFP.



Brandon Weathers, CFP



MONEY Financial Planning, Inc.

*Registered Investment Advisor and one of
the MONEY Financial Services companies.*

**Pacific Tower, Suite 2800
1001 Bishop Street
Honolulu, HI 96813**



Traumatic Aorto-Pulmonary Artery Fistula

Jeffrey M. Lau, MD*
Steven Swartz, MD**
Mark Grief, MD***

A case of traumatic aorto-pulmonary artery fistula is presented and the surgical repair described and discussed. This injury is quite rare and the method of approach is controversial. Although primary repair is advocated, late repair is usual. A review of the literature is included with reference to this particular intracardiac shunt.

Introduction

The development of an aorto-pulmonary fistula after trauma is an uncommon occurrence. Our search of the literature cites only 14 cases^{1,2,3,4,5,6,7,8,9,10,11,12}. Injury to the great vessels alone occurs in only 0.3% to 1.5% of all penetrating injuries of the thorax¹³. Penetrating injuries to the aorta are associated with a high mortality due to massive hemorrhage^{11,14} and cardiac tamponade. Traumatic ventricular septal defects and fistulae between the aorta and the right ventricle are the most common shunts occurring in penetrating injuries of the pericardium¹². Aorto-pulmonary artery fistulae are less common but present with similar signs and symptoms. In this case we present the evaluation and treatment of a patient who suffered a stab wound to the heart and later developed an aorto-pulmonary artery fistulae.

Case Report

A 30-year-old man was admitted to the emergency room with a stab wound in the left second intercostal space and a blood pressure of 90/70mm hg (Figure 1). A chest tube was inserted on the left obtaining 400cc of blood. Due to the finding of distended neck veins and hypotension, he was taken to the operating room immediately and a median sternotomy was

performed. The patient was found to have a cardiac tamponade, with blood filling the pericardium. On opening the pericardium a 1cm laceration of the anterior pulmonary artery was noted at approximately 2cm above the valve (Figure 2). Examination of the sulcus between the aorta and pulmonary artery revealed a posterior perforation with extension into the root of the aorta. Both lacerations were closed with mattress sutures of 4.0 prolene and pledgets.

Postoperatively the patient did well with minimal chest tube drainage. The tubes were removed on the second postoperative day and the patient was discharged on postoperative day seven. On the follow-up examination one week later the patient was noted to have a loud continuous murmur in the left anterior chest. He was also noted to have a wide pulse pressure of 138/56, but had no clinical jugular venous distension or heart failure.

A cardiac catheterization was done (Table I), demonstrating a left-to-right shunt, the oxygen saturation in the pulmonary artery being 6% higher than in the right ventricle. His shunt was calculated to be at 2.2:1 with a cardiac output of 7.64 liters per minute. An arch aortogram was performed (Figure 3) that confirmed an aorto-pulmonary fistula just above the aortic valve.

He was again taken to the operating room where a repeat median sternotomy was performed. Cardiopulmonary bypass was instituted and the fistula between the aorta and pulmonary artery was closed via the ascending aorta (Figures 4 and 5).

TABLE I
Right Cardiac Catheterization Results

RA 16	-02 SAT 69%
RV = 5% EDP 12	-02 SAT 71%
PA 40/20 MEAN 28	-02 SAT 77%
PWP 24	
LV 120/0 EDP 18	
A 120/80 MEAN 98	
C.O. 7.64 L/MIN	
SHUNT CALCULATED 22:1	

Accepted for publication June 1987.

* Assistant Clinical Professor of Surgery, University of Hawaii, John A. Burns School of Medicine

** Chief Surgical Resident, UHJABSM

*** General Surgery Resident, UHJABSM

Reprint requests: Jeffrey M. Lau, MD
2228 Liliha St., Suite 103
Honolulu, Hawaii 96817
(808) 537-1974

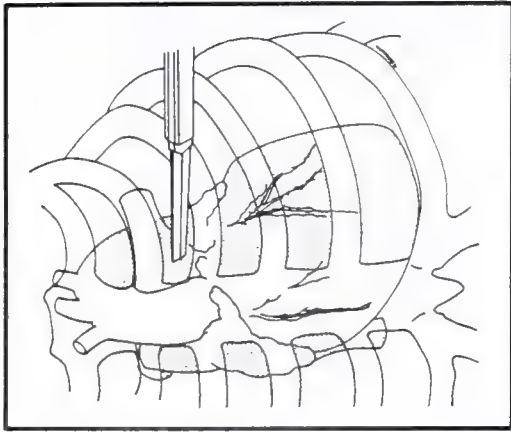


Figure 1: Stab wound to left chest.

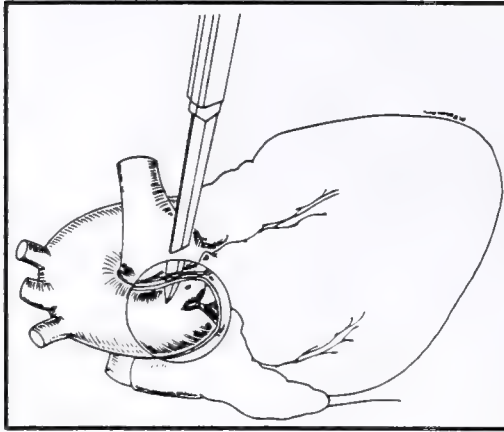


Figure 2: Stab wound.

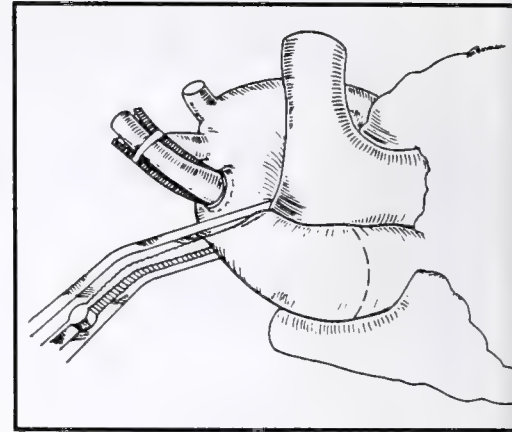


Figure 4: Transverse aortotomy to visualize aorta.

Postoperatively he did well with an uneventful recovery and was discharged on the fifth postoperative day.

Discussion

Professor Rehn performed the original repair of the penetrating heart wound in 1897. Lillehei and Varco performed the first open repair of a traumatic interventricular septal defect in 1956¹⁵. Since then, open-heart surgery has progressed to the point of being a common procedure with minimal attendant complications.

Cardiac tamponade and exsanguination can occur often after penetrating injuries to the heart and great vessels. For a patient

to survive most of these injuries, a small amount of tamponade and clotting must occur in order to evade a lethal hemorrhage. Intrathoracic and intrapericardial bleeding are also diminished if a decompression occurs from a high-pressure to a low-pressure system, as is seen in an aorto-pulmonary artery fistula.

The diagnosis of an aorto-pulmonary artery fistula requires a high index of suspicion when patients have suffered penetrating chest wounds. The occurrence of a continuous murmur is essentially diagnostic, and can occur from several days to several weeks afterward. Once a fistula is suspected, cardiac catheterization and retrograde aortograms should be done to localize the site of the fistula. By obtaining serial oxygen saturation levels while doing a right heart catheterization the site of the fistula can be determined. In this case the rise in the pulmonary artery oxygen saturation identified the site of the fistula. A retrograde aortogram is also necessary to define the entrance site of the fistula since it will help to decide the method of repair.

In reviewing the previous reports of repair^{1,2,3,4,5,6,7,8,9,10,11,12}, approximately half were closed through the pulmonary artery and half through the aorta. The major concerns in closing these fistulae are the risk of occluding the left coronary ostium with closure of the fistula wall, and air retained in the aorta causing air embolus. Thus the approach through the ascending aorta, under cardio-pulmonary bypass is recommended to avoid these problems.

Summary

Penetrating injuries of the chest rarely involve injury to the heart and great vessels. These injuries, however, are usually fatal. Rapid exploration, in patients with suspected cardiac injury, is required to increase the rate of survival. The occurrence of a continuous murmur is highly suspicious of a fistula in patients who have had penetrating injuries to the chest.

The diagnosis of an aorto-pulmonary artery fistula requires a high index of suspicion and requires an aortogram and right heart catheterization for purposes of localization. Once diagnosed, repair can be performed from either the aortic or the pulmonary side. The aortic approach, under cardiopulmonary bypass is recommended to avoid the risk of air embolus or coronary artery ostial occlusion.

REFERENCES

1. Dively WD, Daniel RA, Scott HW Jr: Surgical Management of Penetrating Injuries of the Ascending Aorta and Aortic Arch. *J Thorac Cardiovasc Surg*: 41:23-33, 1961.



Figure 3: Arch aortogram visualizing aorta and pulmonary artery.

(Continued on page 383)



After you see "THE PORTICO" at Mauna 'Olu Estates...

Everything else is all downhill.

There has never been a home in Hawaii anything like this one! We know you've heard all the pretty words and descriptions before, but wait until you see this totally unique concept.

How's this for openers? "The Portico" at Mauna 'Olu Estates is 148 feet long and just ONE room wide!

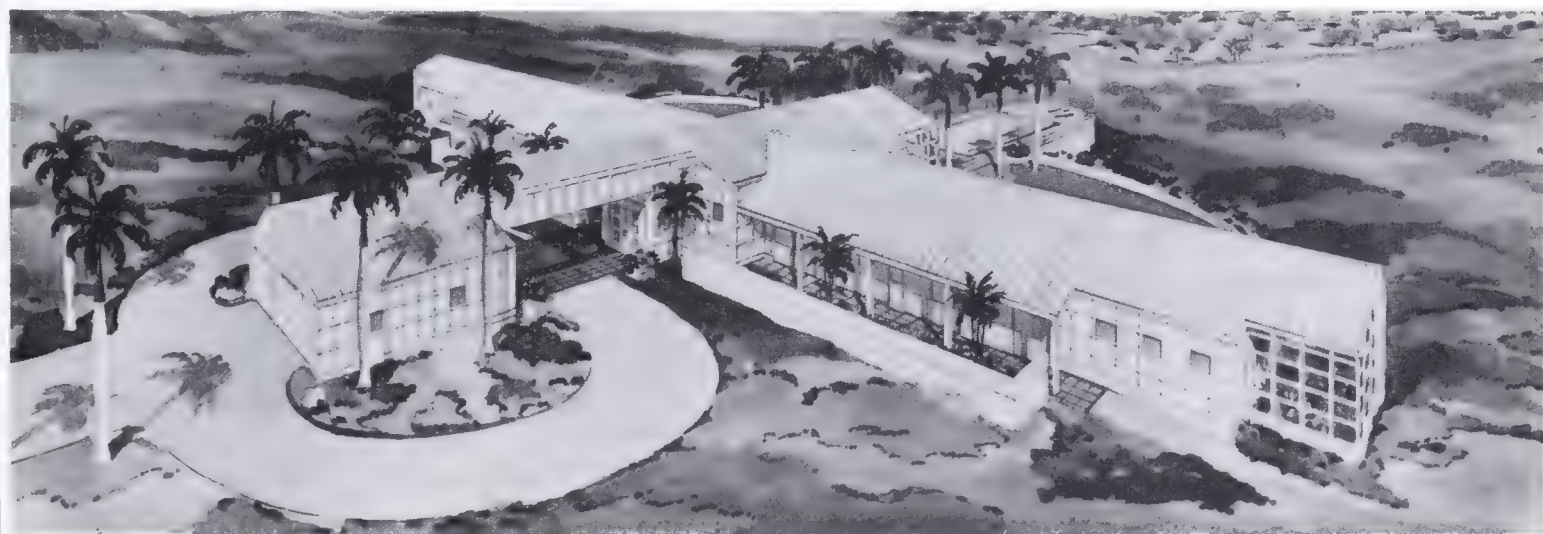
Got your interest? Now add a hilltop location with a view that won't quit — a spectacular view of Makaha Valley, the Pacific Ocean, the Sheraton Makaha Resort and the Makaha golf courses — that is panoramic from EVERY room in the house! And, as with *all* of the fee simple, custom lots being offered in Mauna 'Olu's gated community, the view from the vantage point of this hilltop location will never be obstructed by future development! The Portico's covered terrace at the front of the house leads to the swimming pool and a landscaped courtyard running the full length of the back of the house boasts an unusual porte-cochere, connecting with the garage.

The home itself, designed to take total advantage of the view and the 51,811 square foot lot, includes three bedrooms, two full baths plus two half-baths (one in the garage!), dining room, family room and study. The spacious master bedroom includes a walk-in wardrobe while the master bath offers an elevated platform tub and separate shower.

Come marvel at Mauna 'Olu Estates and "The Portico." This is one you truly have to see to believe. Priced at \$750,000. Courtesy to brokers.

Managing Broker: ERA Concepts Unlimited, Phone: 487-7237

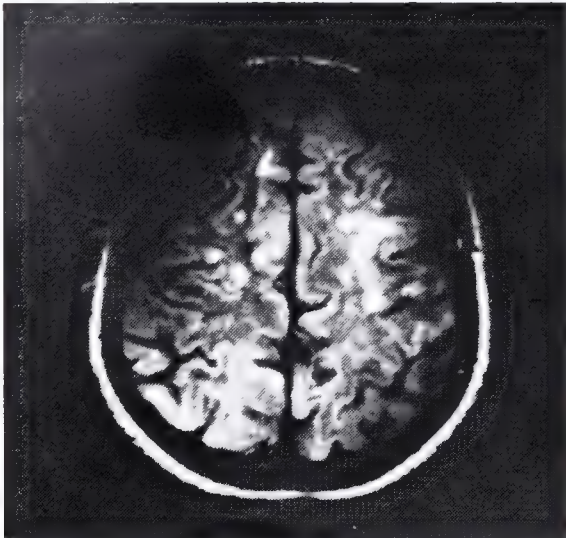
Co-Brokers: Hawaii Hatfield Realty Corp., Phone: 696-8415; Coldwell Banker McCormack Real Estate, Phone: 671-4511



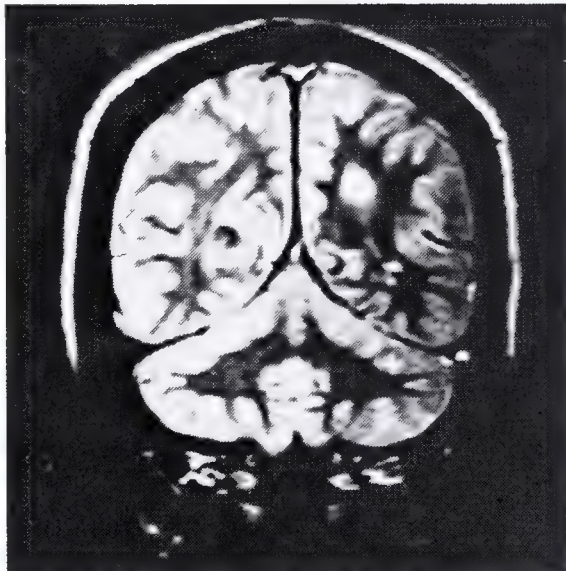
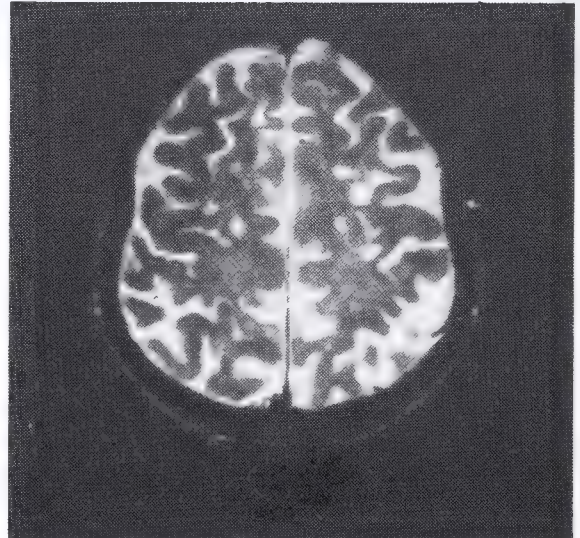
MRI CASE OF THE MONTH

MULTIPLE SCLEROSIS

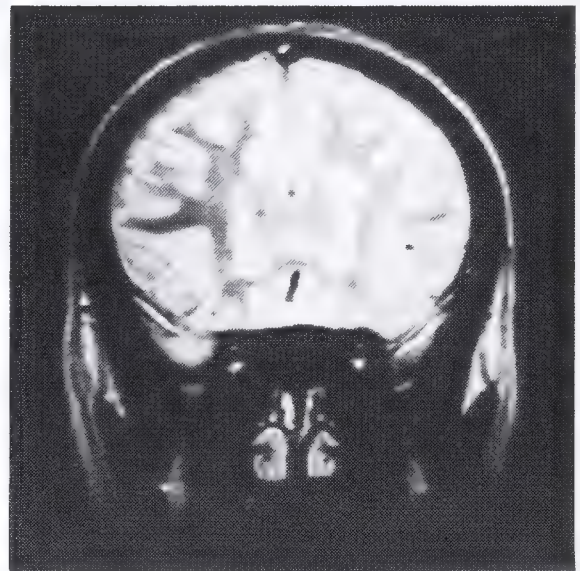
Clinical Information: 29 year old Japanese American female with a history of recent onset of diplopia and two episodes of "optic neuritis".



A
X
I
A
L



C
O
R
O
N
A
L



*These images were produced by MRI Center
of the Pacific using their 1.5 Tesla GE Scanner.*

Radiologic Diagnosis: The films above demonstrate in axial and coronal planes multiple areas of increased signal intensity from the white matter of the cerebral hemispheres. These areas of abnormal signal are confined to the white matter and are consistent with a number of demyelinating processes such as multiple sclerosis. The absence of lesions in the gray matter differentiates this from numerous other processes such as infarction.



42A Ahui St.
Honolulu, HI 96813
Phone 531-6841
Hours: 8:00-5:00 Monday-Friday

2. Fallhnejad M, Kott ACK, Wallace HW: Secondary Lesion of Penetrating Cardiac Injuries. *Ann Surg*: 191:228-233, 1980.
3. Gaillanders AD: Traumatic Aorto Pulmonary Fistula. *Br Heart J*: 17: 411-413, 1955.
4. Halonen PI, Siltanen P, Laustela E: Traumatic Aorto-Pulmonary Fistula. *Ann Chir Gynaecol, Fenniae*: 52:541-546, 1963.
5. Jerasaty RM, Kahn AAH, Knight HF: Traumatic Aortic Pulmonary Fistula. *Cardiology*: 57:358-364, 1972.
6. Lafleche LR, Telmosse F, David A, et al: Communication Aortico-Pulmonaire Trumatique. *Union Medicale Du Canada*: 92:999-1002, 1963.
7. Lam CR, McIntyre R: Air Pistol Injury of Pulmonary Artery and Aorta. *J Thorac Cardiovasc Surg*: 59: 729-732, 1970.
8. Norman JC, Weber WJ, Wilson WS, et al: Post-Traumatic Fistula of the Oarta, Pulmonary Artery and Right Ventricle. *Ann Surg*: 161: 357-360, 1965.
9. Rogers MA, Chesler E, Duplessis L: Surgical Management of Traumatic Cardiac Fistulae. *Thorax*: 24: 543-546, 1969.
10. Snow N, Johnson P: Traumatic Fistula Between the Descending Thoracic Aorta and Left Main Pulmonary Artery. *J Trauma*: 25: 263-265.
11. Symbas PN, Sehdeva JS: Penetrating Wounds of the Thoracic Aorta. *Ann Surg*: 171: 441-450, 1970.
12. Zajtchuk R, Resnekov V, Ranninger L, et al: Traumatic Aorta to Pulmonary Artery Fistula. *Thorax*: 26:219-222, 1971.
13. Thomas KE, Bosher LH Jr: Penetrating Injuries of the Intrathoracic Great Vessels. In Daughtry, D.C. (Ed): *Thoracic Trauma*, Boston, Little Brown, 1980, 129-139.

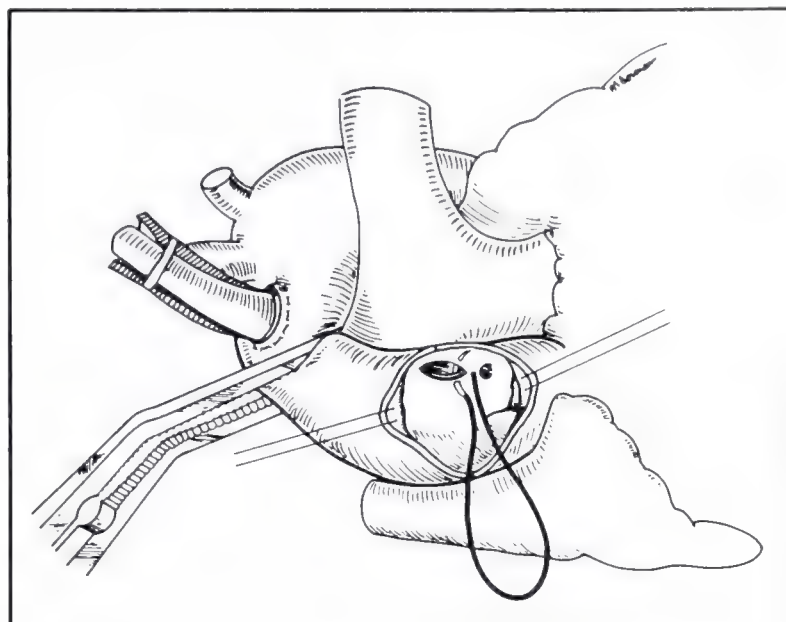


Figure 5: Primary repair of aorto-pulmonary fistula via aortotomy.

14. Brawley RD, Murray GF, Crisler, et al: Management of Wounds of the Innominate Subclavian and Axillary Blood Vessels. *Surg Gynecol Obstet* 131: 1130-1140, 1970.
15. Campbell GS, Crisp NW, Brown EB Jr: Total Cardiac Bypass in Humans Utilizing a Pump and Heterologous Lung Oxygenator. *Surgery*: 40: 364, 1956.

. . . the challenge of a real emergency

Resection of Ruptured Abdominal Aortic Aneurysms in St. Petersburg, Florida

Kirk M. Landau, MD*, Scott Cassidy, MD*, Richard G. Norenberg, MD**

I would be remiss if I did not do as other speakers this morning have done, by mentioning how delightful it is once again to wander around these beautiful islands, where the sweet smell of the plumeria still somehow succeeds in overpowering the odor of the automobile exhaust. It is a distinct honor, too, to be a small part of the 125th anniversary celebration of Queen's Hospital.

Accepted for Publication, June 1987

* Former Resident, Bayfront Medical Center, University of South Florida, Family Practice Program.

** Chairman, Section of General, Thoracic and Cardiovascular Surgery, Bayfront Medical Center.

I practice surgery in St. Petersburg, Fla., which is a city of approximately 300,000 people occupying the southern half of a peninsula known as Pinellas County, jutting into Tampa Bay and the Gulf of Mexico, about halfway down the western shore of the state.

The 1980 census confirmed what we all knew and that is that St. Petersburg has a higher-than-average elderly population. The practice of medicine and surgery in this city is naturally weighted toward the infirmities of the Medicare-age patient.

We studied one such infirmity — ruptured abdominal aortic aneurysms — and I would like to share our findings with you this morning.

Richard G. Norenberg, MD

Numerous studies exist in the surgical literature regarding the operative mortality following resection of ruptured abdominal aneurysms. These studies emanate from teaching institutions and surgical residency programs and involve a success rate of a single surgical team or a single institution. We decided to approach the subject from a consumer's standpoint and ask the question: "If my aneurysm ruptures in St. Petersburg, Fla., what are the statistical chances of my survival . . . assuming I survive long enough to reach the operating room?"

Methods

We reviewed surgical results from all of the hospitals lying in the southern part of the city. Initially, in 1977, we looked at the results for the five-year period beginning in 1972. Recently, we updated the study by reviewing the ensuing five years through 1982.

Several of the hospitals are small "for-profit" institutions with no major emergency room facilities. One of the larger hospitals has an approved three-year family-practice residency program. All but two of the hospitals share a community blood banking system.

More than a dozen different surgeons — all board-certified — practice in this part of town and are represented in the data.

Results

Over the 10-year period, 227 patients were operated on for

ruptured abdominal aortic aneurysms. Operative mortality during the first five years was 74% and during the second five-year period, 55%, yielding a total of 82 survivors over all (Tables IA and IB). Long-term survival was not evaluated in this study. We chose a simple end-point — leaving the hospital alive.

As expected (from previous reports) males predominated (82%). Age range was 55 to 94 with a mean age of 73.8 years (Table II). The 94-year-old was one of the 82 survivors.

The improvement in our mortality rates between the two study periods was gratifying and although specific data to explain this improvement is difficult to identify, certain changes occurred in the community, which cautious conjecture would allow us reasonably to assume played a part. These included the institution of a renal team with dialysis capability (shared by all six hospitals), improved anesthesia techniques in all hospitals especially with regards to monitoring techniques and more aggressive emergency-room physicians.

Discussion

Ruptured abdominal aortic aneurysms continue to challenge the skill of vascular surgeons and the resources of surgical facilities.

Reported operative mortality rates of those who survive long enough to be taken to a health care facility vary from 32% to 82%¹ with current averages in the 50%-55% range (Table III). These figures emanate from facilities where surgical residents are on station. Our studies suggest that comparable mortality figures can be achieved in community hospitals (with readily available attending surgeons).

Studies reported by Robicsek² and also by McCabe³ included a comparison of the mortality of ruptured abdominal aortic aneurysm resection with elective (unruptured) aneurysmectomy (Table IV). As can be noted, a marked disparity exists. Though not specifically included in our study, elective aneurysmectomy in St. Petersburg is associated with a 5%-7% mortality, according to surgical audits performed at several institutions involved in this review. We would tend to support the recommendation by Darling⁴ and others² that abdominal aortic aneurysms — of any size — should be resected before they rupture unless unusual medical problems exist that preclude elective surgical intervention. Darling's studies specifically reviewed small aneurysms and found that the "six-centimeter rule," formerly applied to abdominal aortic aneurysms ("resect if greater than; watch if less than"), should be abandoned. In his pathological studies, almost 20% of the aneurysms that were less than 5 centimeters in diameter presented in a ruptured condition.

Summary

A 10-year retrospective study of surgical mortality rates in ruptured abdominal aortic aneurysm resection at six different community hospitals serving St. Petersburg, Fla., suggests that current overall surgical mortality rates, though high, compare favorably with national studies. Our review supports the view of numerous authors who contend that early resection of

TABLE IA		
St. Petersburg Ruptured Aneurysm Study		
	No. of Patients	
	1972-1976	1977-1981
Operated	104	123
Left Hospital Alive	27	55
Expired	77 (74%)	68 (55%)

TABLE IB		
St. Petersburg Ruptured Aneurysm Study		
Survivors by Hospital —	1972-1977	1978-1981
HOSPITAL A	6/31 80% mortality rate	13/29 55% mortality rate
HOSPITAL B	8/25 68% mortality rate	10/31 68% mortality rate
HOSPITAL C	7/29 76% mortality rate	17/35 51% mortality rate
HOSPITAL D	6/17 65% mortality rate	10/20 50% mortality rate
HOSPITAL E	0/2 100% mortality rate	4/4 0% mortality rate
HOSPITAL F		1/4 75% mortality rate
TOTAL	27/104 74% mortality rate	55/123 55% mortality rate

TABLE II		
St. Petersburg Ruptured Aneurysm Study		
Patient Profile	1972-1976	1977-1981
Sex	82% Males	82% Males
Age	75.3 Years	72.6 Years
Youngest	59 Years	55 Years
Oldest	94 Years	90 Years

TABLE III

Average Operative Mortality Rates Reported
For Repair of Ruptured Abdominal Aneurysms

1964 - Mannick ⁵	32%
1966 - Szilagyi ⁶	58%
1968 - Gwinn ⁷	82%
1975 - Robicsek ²	55%
1977 - McCabe ³	52%
1981 - Pinellas (77-81)	55%

TABLE IV

Mortality of Abdominal Aortic Aneurysms

	No.	Survived	Mortality
Robicsek (1965-1975)			
Ruptured	66	30	55%
Unruptured	414	383	7.5%
McCabe, et al. (1972-1977)			
Ruptured	73	35	52%
Unruptured	—	—	—
Symptomatic	56	47	14.3%
Asymptomatic	364	355	2.5%

aneurysms before rupture occurs, provides the patient with his best statistical chance for survival.

REFERENCES

1. van Heeckeren DW: Ruptured Abdominal Aortic Aneurysms. *Amer J Surg*: 119:402-407, Apr 1970.
2. Robicsek F: Aneurysm of the Abdominal Aorta, Whether or Not, When, and Whom? *Ann Thorac Surg*: 24:241-244, Sep 1977.
3. McCabe CJ, Coleman WS, Brewster DC: The advantage of early operation for

abdominal aortic aneurysm. *Arch Surg*: 116: 1025-1029, Aug 1981.

4. Darling RC: Ruptured Arteriosclerotic Abdominal Aortic Aneurysms. *Amer Surg*: 119:397, Apr 1970.
5. Mannick JA, Brooks JW, Bosher LH, Hume DM: Ruptured aneurysms of the abdominal aorta aneurysmectomy to prolongation of life: 12-year review of 480 cases. *Ann Surg*: 164:678, 1966.
6. Gwinn CB, Oury JH: A review of abdominal aneurysms at the Naval Hospital, San Diego, Calif. *Amer J Surg*: 34:142, 1968.

. . . we hope our members agree

HMA Testimony to Senate Judiciary Committee on Medical Malpractice Insurance, July 1987

The approximately 1,800 members of the Hawaii Medical Association (HMA) applaud the Hawaii State Senate Judiciary Committee's efforts to ferret out the causes of the medical malpractice insurance problem. We would also like to express appreciation for the opportunity to present testimony regarding the physician's perspective on medical malpractice insurance.

The medical malpractice insurance issue poses one of the most critical problems today for the medical profession and the public. The steep cost of buying protection and the growing threat of suits worry all of us. We come to you today to request that you, the key lawmakers in our State, give high priority to passage of legislation that will ease the situation.

Physicians and hospitals have for years purchased liability insurance to protect themselves against unforeseen occurrences to patients and clients. Twenty years ago, the cost and availability of malpractice insurance was not a problem. In the early '70s, however, the incidence of malpractice cases increased and insurance companies began to look carefully at their investments and their costs of insuring malpractice risks. Slowly, the availability of affordable malpractice insurance began to diminish.

Today in Hawaii, there is only one insurance carrier providing

medical malpractice insurance coverage to private-practice physicians: The Medical Insurance Exchange of California (MIEC). MIEC, and other self-insured, indemnification, and group coverage plans available in Hawaii insure or indemnify the following physicians:

Carrier	# of Physicians Covered
Medical Insurance Exchange of California (MIEC)	874
Hawaii Association for Physicians Indemnification (HAPI)	370
CNA (covering groups of 5 or more physicians)	248
Kaiser Permanente (self-insured)	212
The Doctor's Company (UH Medical School Faculty)	72
MMI (exclusively for physicians whose major practice is at The Queen's Medical Center)	50
Total Insured Physicians	1,826

Accepted for Publication, July 1987

According to Hawaii Medical Service Association (HMSA) data, there are approximately 1,936 actively practicing physicians in the State. Thus, approximately 95% of the practicing physicians in the State are dependent on the above carriers for insurance protection. It should be noted that all hospitals in the State require physicians to have insurance coverage in order to maintain hospital privileges.

MIEC is a physician-owned, not-for-profit company headquartered in Oakland, Calif. It exists solely to provide liability insurance coverage to physicians. Since Aug. 1, 1985, the company has offered only "claims-made" liability coverage, which means that the physician is covered only for claims submitted during that policy year for which premiums are paid. Any overpayment of premiums are returned to the policyholders later on.

Formed by physicians, to provide sorely needed, affordable insurance coverage to physicians, even MIEC has been unable to keep rates down in the face of the liability insurance crisis.

In just two years, between 1985 and 1987, rates have increased over 150% for some specialties. The table below illustrates the MIEC premium rates for \$1 million/\$3 million coverage for Internal Medicine (IM), General Surgery (GS), and Obstetrics/Gynecology (OBG) physicians:

	<u>IM</u>	<u>GS</u>	<u>OBG</u>
1985	\$2,668	\$ 9,776	\$19,256
1986	\$4,216	\$15,168	\$28,648
1987	\$6,936	\$24,960	\$47,144
	Up 160%	Up 155%	Up 145%

Just this year, MIEC sought and obtained an approximately 35% increase in rates over the already projected 25% step rate increase in the "claims-made" system. This added hike was advised by MIEC's actuary, and eventually approved by the State Insurance Commissioner, to cover claims and losses predicted for this coming policy year. (The "step up" increase is a diminishing amount over the first several years to cover the period after the first year, when additional claims come in.)

The HMA had reluctantly supported MIEC's rate increase. While our member physicians were angry, disturbed and concerned over the total 66% rate hike, even less attractive was the prospect that MIEC would be forced to leave Hawaii. MIEC had indicated that it would be unable to conduct business here in Hawaii with a premium increase of less than the requested amount. Somewhat ironically, physicians breathed a sigh of relief when the rate increase was approved. And, if the insurance situation does not improve, we envision a similar scenario next year.

The cost factor of malpractice insurance is but one aspect of the issue that may have long-term impact on the cost and availability of medical services. Let us consider, for example, a young obstetrician (Dr. Physician) who performs deliveries. Because he is in one of the highest risk classes for a malpractice action, he is faced with a \$47,000 insurance premium (the current MIEC rate), before he delivers his first patient.

If Dr. Physician is participating in HMSA (80% of Hawaii's physicians are participating physicians) HMSA will not reimburse a separate item for his insurance premium.

As a participating physician, his fees are, in effect, capped by HMSA. HMSA reimburses him at a rate of 80% of the "Usual, Customary, and Reasonable" fees for his specialty. There is virtually no room for expansion here. Even if he increased his professional fees in order to cover his insurance (as he does to cover other costs, e.g. office overhead, personnel costs, etc.), HMSA will still only pay him 80% the predetermined fee. As a

participating physician, Dr. Physician will not be allowed by HMSA to pass through his insurance costs to his patients. Thus he is stuck with a \$47,000 premium with no way to include it in his charges. If he is participating in Medicaid, his reimbursement will be limited by law to 56% of his 1986 fees. If his patient is under Medicare, his fees will have been frozen at 1984 levels with severe penalties for those who charge more than the allowable amounts. The Workers' Compensation Program and CHAMPUS (the health plan for military dependents) have also set limits on reimbursable amounts.

If Dr. Physician cannot afford the added cost of malpractice insurance, he could become "non-participating" with HMSA and pass the cost on to his patients who are HMSA subscribers; change his practice specialty; give up the delivering-babies portion of his practice, which would put him in a lower-risk class; or leave Hawaii and go to a state that has a more favorable tort system.

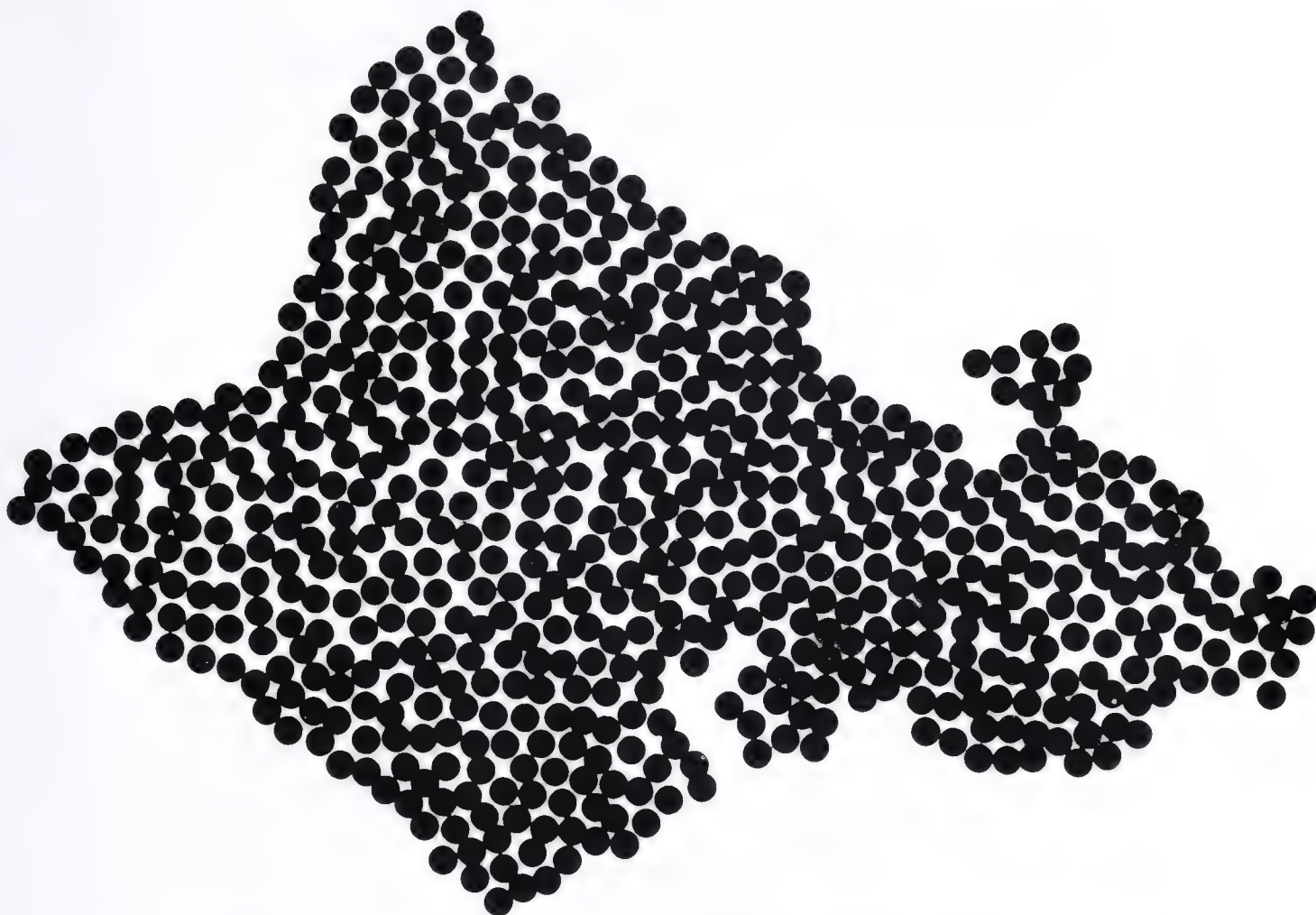
In our example, as it is in real life, the only way our physician can pass his insurance cost through to the patient is to become a non-participating physician. This means that now all charges for his services must be paid directly by the patient. Even though his patient may receive partial reimbursement from a health insurance plan, the plan will not pay the physician directly. The patient must now pay medical bills on his or her own. Thus, any rise in malpractice insurance is borne, not by third-party payors who have effectively insulated themselves against such costs, but by society as a whole.

All of society bears the burden of increased health care costs. As more and more physicians become non-participating and pass through the cost of malpractice insurance premiums to their patients, the third-party carriers will be forced to increase their incentives to retain or attract physicians to participate in their health plans. This will cost the carriers, and the only way for the carriers to make up this loss would be to increase their health plan premiums to the customers. The added cost of either situation is borne by society.

In preparation for these hearings, the HMA surveyed 2,100 physicians in Hawaii to assess the impact on Hawaii's doctors. A similar survey was conducted in 1985. The 827 responses (39%) to date indicate:

- 1—63 physicians have already stopped obstetrical care:
 - 46 Family Practitioners, mostly from the Neighbor Islands and Rural Oahu, no longer deliver babies.
 - 12 OB/GYN specialists have already dropped deliveries from their practices.
 - 5 anesthesiologists no longer give obstetrical anesthesia. (The 1985 survey had shown 36 had quit OB.)
- 2—50 physicians (38 OB/GYN, 10 Family Practitioners, 2 Anesthesiologists) have indicated that they are considering eliminating obstetrics from their practice.
- 3—71 physicians have stopped doing surgery (compared to 36 in 1985). 51 are considering stopping surgery.
- 4—27 physicians have retired early; 228 are considering early retirement. (In 1985, 32 indicated early retirement, with 154 considering the change.)
- 5—An additional 25 have changed specialty, while 57 are considering doing so.
- 6—196 have already limited their high-risk practice, e.g. emergency cases, Medicaid patients, transient patients; 191 are considering doing so.
- 7—26 have dropped their malpractice insurance and 72 are considering doing so.

The HMA is well aware of the complexity of the malpractice insurance issue. We recognize that there is no single solution to



Only Hawaiian Tel's pager network can reach you at all these points.

We'll get right to the point.

Hawaiian Tel offers the only pager network that provides Island-wide and state-wide coverage.

So you're in touch from Waimea to Waimanalo. Makaha to Makapuu. Haleiwa to Honolulu. And all points in between.

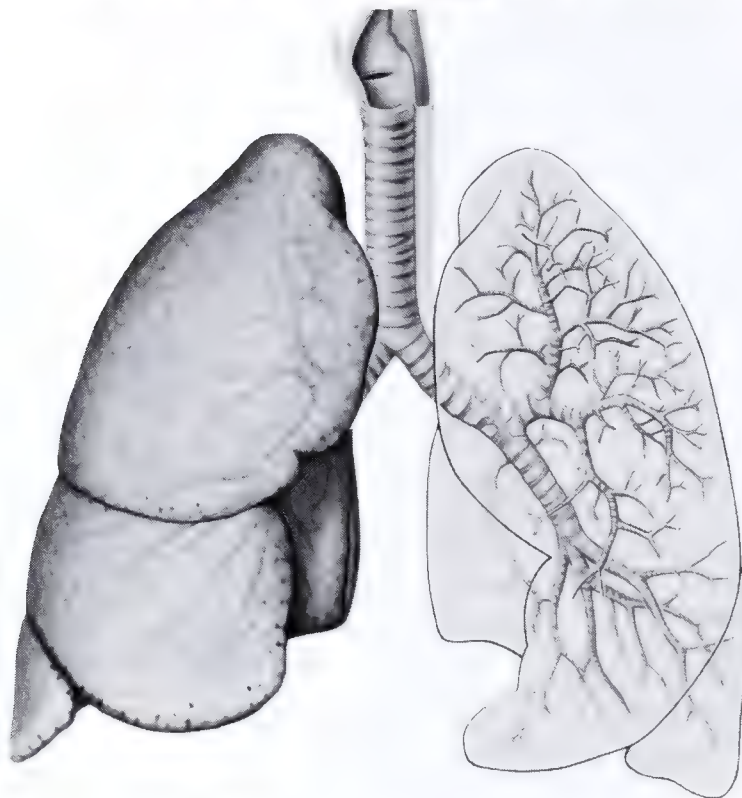
We also offer extensive Neighbor Island and interisland service. Comprehensive warranties on every pager we rent or sell (both tone and digital readout models). Plus, our monthly network service fee works out to less than a dollar a day. That's a small price to pay for constant contact with your business.

To take advantage of all our good points, call 732-9500 on Oahu or 1-800-232-8822 on the Neighbor Islands.

HAWAIIAN TEL GTE

Beyond the call

Consider the causative organisms...



Ceclor[®]
cefactor

250-mg Pulvules[®] t.i.d.

**offers effectiveness against
the major causes of bacterial bronchitis**

Haemophilus influenzae, Streptococcus pneumoniae
(ampicillin-susceptible and ampicillin-resistant)

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor[®] (cefactor)

Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β -hemolytic streptococci).

Contraindication:
Known allergy to cephalosporins.

Warnings:
CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of non-susceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

- Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%.

- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

(072886R)

PA 8794 AMP

©1987, ELI LILLY AND COMPANY



700241

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285
Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

the problem.

The HMA has advocated in the past, as it still does now advocate a coordinated and committed effort by all parties involved, to improve the situation in Hawaii.

It will require stronger policing of physicians by physicians. The medical profession must make a stronger effort either to remove from practice those physicians delivering care below the community's standard of care, or help them upgrade their skills in order to meet the accepted standard of care.

It will require modifications in the tort system so that malpractice awards are more reasonable and objective, and so that the injured patient would receive a more substantial portion (at least 50%, compared to an average 28% today) of any damage award.

It will require improved monitoring of the insurance industry by the State Insurance Commissioner to ensure that companies operate in a manner that reflects the most cost-effective practices possible.

The HMA was pleased to note that its recommendations for alleviating the malpractice situation here in Hawaii were echoed by the United States General Accounting Office (GAO) and the United States Department of Justice.

Over the past two years, GAO has been studying the malpractice insurance problem.

It has issued a series of six reports on the subject. In the final report, *A Framework for Action*, the GAO suggests appropriate actions to the problem.

According to the GAO, the best way to deal with medical malpractice is to prevent it from occurring in the first place. This may be accomplished by: (1) Disciplining or removing from practice those physicians not providing acceptable quality of care; (2) protecting patients from physicians who lose their licenses to practice in one state but have moved to another state to practice; (3) developing and expanding risk-management programs to educate providers concerning better ways of delivering quality care, and (4) improving communication with patients

regarding potential risks for unexpected or bad outcomes of medical procedures.

The GAO also recommends changes in tort laws to bring more efficiency, predictability and equity in the way medical malpractice claims are resolved. Changes recommended by the GAO include: (1) Shortening statutes of limitations; (2) abolishing joint and several liability; (3) instituting a sliding scale for plaintiff attorneys' fees; (4) modifying the collateral source rule; (5) allowing mandatory periodic payment of awards; and (6) imposing caps on indemnity payments.

The GAO also believes that state insurance commissioners might not be discharging their duties effectively or efficiently. The GAO indicated that state legislatures will need to decide whether the data insurance companies are required to provide to state insurance departments are sufficient, needed and used effectively.

The GAO also believes that alternative approaches may offer advantages for resolving claims. Among alternatives suggested were: Pretrial screening panels, mediation, arbitration, or contractual agreements between provider and patient.

Physicians bear a special responsibility in society to provide the best care possible. When the legal system begins seriously to interfere with those responsibilities, changes in the system must be addressed. Change is needed not to protect the "special interests" of physicians but to protect the interests of society to have access to affordable, high-quality medical care.

Thank you for allowing us to present our testimony to you today.

James Lumeng, MD

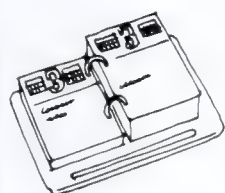
President-elect
Hawaii Medical Association

Becky Kendro

Assistant Executive Director
Hawaii Medical Association

Ray Higa

Director of Research
Hawaii Medical Association



Continuing Medical Education

CALENDAR OF ACCREDITED EVENTS — CATEGORY 1

Accredited programs of CME allow one unit of AMA credit for each hour of instruction excluding all "breaks." Asterisked programs also are accredited for AAFP prescribed credit.

LOCAL ACCREDITED PROGRAMS ONGOING

American Cancer Society, Hawaii Pacific Division Inc.

1. Skin Tumor Conference, first Friday, 12:30-1:30 p.m., Queen's University Tower, Room 504.
2. Visiting Professor Programs: Tutor Oncologists and Oncology Nurse Consultant. (For further information, call 531-1662.

John A. Burns School of Medicine

1. Department of Medicine

- *A. Case Conferences, second and fourth Tuesdays, 12:30-2 p.m., Queen's University Tower, Room 618.
- *B. Grand Rounds, first and third Tuesdays, 12:30-2 p.m., Queen's University Tower, Room 618.
- C. Endocrinology Grand Rounds, first Tuesday, 5:30-6:30 p.m., Queen's University Tower, Room 506.
- D. UH-Queen's Conference, every Friday, 8-9 a.m., Queen's Medical Center, Mabel Smyth Auditorium.
- E. Cardiology Grand Rounds, third Tuesday, 6:30-7:30 p.m., Queen's University Tower, Room 508.
- F. Infectious Disease Grand Rounds, first and third Thursdays, 5 - 6 p.m., Queen's Nalani I Conference Room.

- G. Dermatology Grand Rounds, second Wednesday, 7:30-9:30 a.m., Queen's Medical Center, Queen Emma Clinic.
- H. Pulmonary Grand Rounds, fourth Monday, 12:30-1:30 p.m., Queen's Medical Center, Kamehameha Lounge.
- I. Nuclear Medicine Grand Rounds, third Wednesday, 5-6:30 p.m., Straub Clinic & Hospital, Doctors' Dining Room.
- J. Medical-Surgical GI Grand Rounds, third Friday, 12:45-1:45 p.m., Kuakini Hospital, PB4 Classroom.
- K. Rehabilitation Hospital of the Pacific Grand Rounds, first and third Thursdays, 7:30 - 8:30 a.m., Rehabilitation Conference Room, first floor.
- L. Neurology Grand Rounds, second Thursday, 12:30-1:30 p.m., Queen's Medical Center, Kam Auditorium.

2. Department of Obstetrics and Gynecology

- *A. Grand Rounds, Wednesdays, 7:30-8:30 a.m., Kapiolani Medical Center for Women and Children, second-floor auditorium.

- B. Tuesday Conference, Tuesdays, 1-2 p.m., Kapiolani Medical Center for Women and Children, second-floor auditorium.

3. Division of Orthopedics

- A. Fracture Conference, Mondays, 5-6 p.m., Queen's University Tower, Room 618.

- B. Shriners' Tuesday Conference, Tuesdays, 7:15-8:15 a.m., Shriners Children's Hospital, Auditorium.

4. Department of Pediatrics

- A. Grand Rounds, Thursdays, 8-9 a.m., Kapiolani Medical Center for Women and Children, second-floor auditorium.

- B. Monday Noon Conference, 12:45-1:45 p.m., Kapiolani Medical Center for Women and Children, second-floor auditorium.

- C. Pediatric Infectious Disease Conference, Thursdays, 12:30-1:30 p.m., Kapiolani Medical Center for Women and Children, third-floor conference room.

- D. Perinatal Grand Rounds, Fridays, 8:15-9:15 a.m., Kapiolani Medical Center for Women and Children, Conference Room B.

5. Department of Psychiatry

- A. Grand Rounds, Fridays, 8-9:30 a.m., Queen's University Tower, Room 618.

- B. Scientific Forum, Mondays, 12:30-2 p.m., Kapiolani Medical Center for Women and Children, Conference Room 626.

6. Department of Surgery

- A. Grand Rounds, first, second, and third Saturdays, 7:30-9 a.m., rotating hospitals.

- B. Statistical M&M, last Saturday, 7:30-9 a.m., rotating hospitals.

- C. Journal Club, first and third Tuesdays, 6-8 p.m., Queen's University Tower, Room 620.

- D. Medical-Surgical GI Grand Rounds, third Friday, 12:45-1:45 p.m., Kuakini Medical Center, PB4 Classroom.

- E. Pediatric Surgical Grand Rounds, first Friday, 12:45-1:45 p.m., Kapiolani Medical Center for Women and Children, Conference Room B.

- F. Basic Science Lecture, Wednesdays, 7:15-8:15 a.m., Queen's University Tower, Room 618.

7. Department of Family Practice

- *A. Conference, fourth Tuesday, 1-2 p.m., Kapiolani Medical Center for Women and Children, Executive Dining Room.

8. Department of Pathology

- A. Neuropathology Conference, first Saturday, 8-9 a.m., St. Francis Hospital, Sullivan IV Classroom.

For further information on any of these programs, please call the Continuing Medical Education office at 948-6949.

Castle Medical Center

- 1. CME Programs, first and third Tuesdays, 12:30-1:30 p.m., Castle Medical Center's auditorium.

- 2. Windward Oncology Programs, second and fourth Tuesdays, 12:30-1:30 p.m., Castle Medical Center's auditorium.

For further information, call the Inservice Department at 263-5187.

Chart

- 1. CME Programs, Thursdays, 8-9 a.m. Topics and visiting professorships to be announced.

For further information, or to be placed on the mailing list, contact Comprehensive Health and Rehabilitation Training (CHART) at 523-1674.

G.N. Wilcox Memorial Hospital

- 1. General Medical Staff Meeting, Quarterly in January, April, July, and October, 7:30 p.m., Hospital Conference Room.

- 2. Clinical Review, Mondays (occasional Friday), noon-2 p.m., Hospital Conference Room.

- 3. Journal Club, last Monday, bimonthly (January, March, etc.), Hospital Conference Room.

For further information, call Medical Staff Services, 245-1173.

Hawaii Medical Association

- 1. HMA Maternal and Perinatal Mortality Study Committee, Monday, 5:30 p.m., on an on-call basis. 320 Ward Ave., Suite 200, Cat. 1 on hr. for hr. basis. (Call 536-7702 to confirm meeting schedule.)

Hawaii Ophthalmological Society

- 1. Monthly Dinner Meeting, third Thursday of each month (except July, August, and December), 6:30-9:30 p.m., The Pacific Club.

Hawaii Thoracic Society

- 1. To be announced — Visiting Professorship Program State-wide.
- 2. Sinclair Chest Club Quarterly Dinner Meetings, January, April, July, and October. Call Rosemary Respicio, BSN, at 537-5966 for dates and speakers.

Hilo Hospital

- 1. Radiology Conference, first Friday, 12:30-1:30 p.m., GC-1 Conference Room.

- 2. Tumor Conference, second Friday, 12:30-1:30 p.m., GC-1 Conference Room.

- 3. Cardiology Conference/Clinical Department Update for Medical Staff, third Friday, 12:30-1:30 p.m., GC-1 Conference Room.

- 4. Pathology Conference/Morbidity-Mortality Review, fourth Friday, 12:30-1:30 p.m., GC-1 Conference Room.

- 5. Visiting Professor/Program/Network for Continuing Medical Education Tapes (ETV), Saturdays, 7-8 a.m., GC-1 Conference Room.

For further information, call Administration at 969-4382.

Kaiser Foundation Hospital

- 1. Obstetrics/Pathology Conference, first Monday, noon-1 p.m., Moanalua fourth-floor conference room.

- 2. *Medicine Grand Rounds, Tuesdays, 8-9 a.m., Moanalua Auditorium.

- 3. Tumor Board, Tuesdays, noon-1 p.m., Moanalua Auditorium.

- 4. Pathology Conference, Fridays, 7-8 a.m., Moanalua Conference Room A.

- 5. Surgical Grand Rounds, Fridays, 8-9 a.m., Moanalua Auditorium.

- *6. Family Practice Grand Rounds, fourth Thursday, 7:45-9 a.m., Moanalua fourth-floor conference room.

- 7. Obstetrics/Perinatal Conference, last Tuesday, 8-9 a.m., Moanalua fourth-floor conference room.

- 8. Network for Continuing Medical Education (NCME) Videotape Program, Monday-Thursday, noon-2 p.m., Moanalua Conference Room C-D.

For further information, call CME Office at 834-9496 for topics.

Kona Hospital

- 1. Monthly CME Meeting, third Friday, 7:30-8:30 a.m., Hospi-

tal Conference Room.

2. Grand Rounds/Tumor Board, third Thursday, 7:30-8:30 a.m., Hospital Conference Room.
3. Visiting Professor Programs, (For further information, call 322-9311 ext. 29 or 55.)

Kuakini Medical Center

1. Visiting Professor Lectures (ongoing).
2. Guest Lectures (ongoing).
3. Neurology Conference, second Monday, 12:30-1:30 p.m., private dining room.
4. Nephrology Conference, third Monday, noon-1 p.m., private dining room.
5. Department of Ophthalmology Meeting, first Tuesday, 12:30-1:30 p.m., private dining room.
6. Internal Medicine Study Club, bimonthly, second Tuesday, 6-7 p.m., PB-4 Conference Room.
7. Department of Medicine (M&M), fourth Tuesday, 1-2 p.m., Hale Pulama Mau Auditorium.
8. Endocrinology Conference, first Wednesday, 12:30-1:30 p.m., private dining room.
9. G.I. Conference, second Wednesday, 12:30-1:30 p.m., private dining room.
10. Infectious Disease Conference, third Wednesday, 12:30-1:30 p.m., private dining room.
11. Oncology Conference, Thursdays, 7:30-8:30 a.m., PB-5 Conference Room.
12. Hematology and Oncology Conference, first Thursday, 12:30-1:30 p.m., private dining room.
13. Pulmonary Conference, second Thursday, 1-2 p.m., private dining room.
14. Rheumatology Conference, third Thursday, 12:30-1:30 p.m., private dining room.
15. Cardiology Conference, fourth Thursday, 12:30-1:30 p.m.,

private dining room.

16. Surgical Conference, first Friday, 12:45-1:45 p.m., PB-5 Conference Room, (Note: Also fourth Friday, if there are five Fridays in a month.)
17. Nutrition Conference, bimonthly, second Friday, 12:30-1:30 p.m., private dining room.
18. Surgical Trauma Conference, second Friday, 12:45-1:45 p.m., PB-5 Conference Room.
19. Surgical Mortality and Morbidity Conference, last Friday, 12:45-1:45 p.m., PB-5 Conference Room.

Maui Memorial Hospital

1. Department of Medicine, first Thursday, 7-8 a.m., auditorium.
2. Department of Surgery, second Thursday, 7-8 a.m., auditorium.
3. Department of Obstetrics & Gynecology, third Thursday, 7-8 a.m., auditorium.
4. Department of Pediatrics, fourth Thursday, 7-8 a.m., auditorium.
5. Fifth Thursday Meeting: 7-8 a.m., auditorium.
6. Tumor Board Conference; second Friday and fourth Wednesday, 7-8 a.m., multipurpose room.
7. Anesthesia Conference, second Wednesday, 7-8 a.m., dining room.

The Queen's Medical Center

1. Anesthesiology Conference, first and second Wednesdays, 7-8 a.m., Doctors' Conference Room.
2. QMC Cardiology Rounds, Wednesdays, 9-10 a.m., Kam Auditorium.
3. Emergency Medicine Conference, first Monday, 7-8 a.m., Ultrasound Conference Room #1.

(Continued on page 394)

CLASSIFIED NOTICES

To place a Classified Notice, call Leilani at 521-0021.
4 line minimum, approx. 5 words per line.
Payment must accompany order.

BUSINESS OPPORTUNITIES

NEUROSURGEON

Board certified with current Hawaii license. Special interest in pediatrics & spinal disorders. Interested in establishing practice either solo or group. Interested parties write: Department #350
c/o Pacific Business News
P.O. Box 833
Honolulu, Hawaii 96808

OFFICES

Has parking been a problem for you and your clients? Call us today! We have the office space for you with ample free parking. Bobbie Martinsen (R) 521-0321
HAWAII MANAGEMENT CORP.

SERVICES

DOCTORS: Does your office need upholstery work? Classic Auto Treasures Upholstery Division has expanded their expertise. We now provide a 1-day upholstery service on exam tables, office chairs, furniture, etc. Wide range of colors of top of the line vinyls and fabrics.
846 Pohukaina Street 537-1100.

*No matter what
your profession is,
you didn't get
there without
learning the facts.*

Call VALUE CHOICE
to learn the facts on how
our leasing can reduce
your monthly vehicle and
equipment costs by up to
30 percent and enable you
to save or invest your down
payment. Or how the new
tax laws may benefit you.

VALUE CHOICE



Cars • Vans • Trucks • Rentals/Leasing

955-2622

A division of Aloha Funway Rentals

Professional Buyer's Guide HEALTH CARE & ORTHOPEDIC PRODUCTS

- Cervical Collars
- Abdominal / Rib Binders
- Orthopedic Supports / Lumbar Sacral, & Orthocast
- Extremity Braces Supports
- Sleep Pillows
- Wedge Recliner Pillows
- Posture Backrest
- Contourpedic Cushions
- Medical Massage Vibrators
- Cervical Traction Pillows
- Children's Furniture
- Executive, Secretarial & Lounge Furniture
- EZ Sleep Mattress / Pillows
- Adjusting - Therapy - Examination Tables

***Charge It: Use Your Credit Card
To Order Call TOLL-FREE
1-800-321-6870 (national)
1-800-238-7698 (in Ohio)**

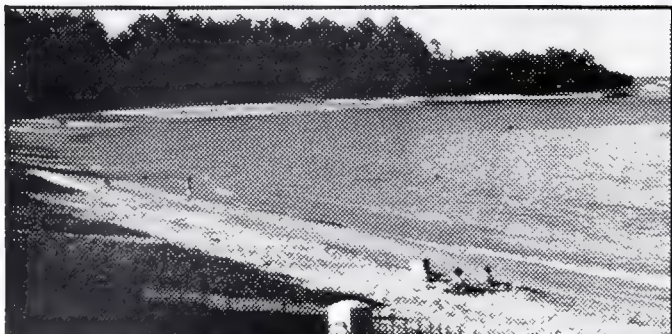


Posture Support Mfg., Inc.
P.O. Box 39370
Solon, Ohio 44139

*When ordering ask for literature and price list

REAL ESTATE OPPORTUNITIES

OCEANFRONT FEE SIMPLE



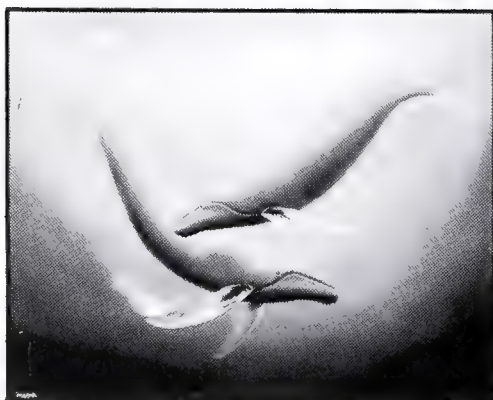
- ★ HUKILAU BEACH PICTURED ABOVE. FORMER HOME OF HOLLYWOOD STAR. COZY 2 BEDROOM, BUT UNIQUE AND VERY PRIVATE WITH WHITE SAND BEACH AT YOUR DOORSTEP.
BOB GRUNDER 955-0632 \$350,000.
- ★ OCEANFRONT FEE SIMPLE AT LANIKAI ... NEED WE SAY MORE? THE BEST BUY FOR A LARGE HAWAIIANA HOME WITH POOL, SERVANTS QUARTERS AND PRIVATE TOP STORY NEW MASTER SUITE.
JERRY EDWARDS 735-1569 \$995,000
- ★ OCEANFRONT FEE SIMPLE AT KOKO HEAD. THE ONLY HOME ON THE WATER NOW OFFERED. 5 OR 6 BEDROOMS, 3 CAR GARAGE, PARKING FOR 10 CARS, ORCHID GARDEN, POOL, BILLIARD ROOM. MUCH MORE.
\$2,975,000

Duffy Ryz LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 715, Honolulu, Hawaii 96815

Libbie Company



Wyland

ART GALLERY FOR SALE

International Art Gallery in Waikiki at the newly remodeled Discovery Bay Shopping Center. The open frontage provides an inviting entrance that captures up to 80 percent of the walk-by traffic.

John Pitre, one of the top artists in the United States, is a tremendous asset to the gallery. Pitre has sold more than 10 million prints worldwide. A wide variety of world class and local artists combine their talents to make an interesting and diverse collection.

\$750,000 Leasehold

Improvements, Contracts & Inventory

Lewis Trusty, M.B.A., Real Estate • 942-3838

1060 Young St., #210 523-1381

Hono., HI 96814

REAL ESTATE SERVICES

Member: The Honolulu Board of Realtors and MLS

**A TOTAL STAFF — AND REALTY SERVICE
IN WAIANAE**



Anne White (R)



Marie Hatfield (R)

Larry Hatfield (PB)
Madeline Mong (RA)
Doris Oshiro (RA)
Jill Johnson (RA)
Paul Carter (RA)
Sharon Moore (RA)
Bob Hoffman (RA)

**Call:
696-8415**

Alberta Keamo (RA)
Arch Cook (RA)
Valerie Cook (RA)
Denise Martin (RA)
C. Gay Hatfield (RA)
Phylis Perry (RA)
Renee Kamikawa (RA)

PROPERTY OF THE MONTH

Custom 1 acre + lots Makaha
Valley - Mauna'Olu Estates.

HAWAII HATFIELD REALTY CORP.

85-833 Farrington Hwy., Waianae

SALES • VA/FHA • MANAGEMENT • NOTARY

A PILOT'S VIEW



Cozy and Immaculate Executive 3 bedroom home with fantastic lanai-pool area for entertaining clients/friends. Overlooks **MAGNIFICENT VIEWS** all around — of Diamond Head, mountains, marina. Very **PRIVATE** with secured gate. A "MUST SEE"!

\$675,000 (L).....MLS40098

NONA MEINEN (R) 395-6155

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
732-1414

HAWAII KAI OFFICE
395-7522

REAL ESTATE OPPORTUNITIES

PRESCRIPTION FOR SUCCESS

A luxury presidential suite at Century Center, a condo project that was designed to encompass a total lifestyle. You can live, work, "work out" and dine in total elegance in one environment. Our two bedroom two bath presidential suite of 1,205 sq. ft. comes with a 390 sq. ft. two room office on a lower floor. **\$315,000. LEASEHOLD**

OFFICE MAGIC

You couldn't pull anything better out of a hat than this 575 sq. ft. 2 room mezzanine office which features two walls of floor to ceiling bookcases, one wall of built-in storage, a large built-in safe, 17 built-in lateral files. A half bath and a coffee bar complete this outstanding office for an attorney, accountant or psychiatrist. **\$125,000. LEASEHOLD**

OCEANFRONT HIDEAWAY

When the going gets tough run away to this utterly charming 2 bedroom 2 bath plus den waterfront home on the North Shore. Only 8 yrs. old and in perfect condition it is built to stand the ravages of surf, sand and time. **\$345,000 FEE SIMPLE.**

Please call Bill or Ginger Sinsabaugh, Realtors, for further information or appointments.

Office: 531-5311

Cellular: 226-6831

Home: 524-3913



Waterfront Properties INC

1188 BISHOP ST., #2407



OCEANFRONT KAHALA FEE SIMPLE

Secluded lushly landscaped 18,000 plus sq. ft. property with a prestigious Royal Place address. Located on a quiet cove where Black Point meets Kahala Beach, surrounded by grand houses, this listing offers a unique opportunity to create your own OCEANFRONT estate..... \$5,900,000

Call Penny Bradley (R) 523-0456
or Marysia Coleman (R) 735-5168

Bradley
PROPERTIES LTD
(808) 523-0456

1177 Kapiolani Blvd., Honolulu, HI 96814

VACATION AT MALAEKAHANA



Let your family enjoy this luxurious 6 bedroom, 4-bath home at Malaekahana Bay. This exquisite estate is one of the most beautiful country rentals on the North Shore and is perfect for a family get together. The property can sleep up to 16 people and includes paddle tennis court and outdoor spa overlooking the ocean. Call for a brochure:

\$250 per day 3 day. minimum

Nancy Bathen (R) 395-4565

HILL & CO.

specialists in fine residential properties

HONOLULU

373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY

BEST BUYS For The Investor or First Time Owner

MAKIKI. 1040 Kinau St. One bedroom unit priced below assessed value. Security, parking, low lease rent and maintenance. \$58,500 (L) (35495)

Gisela Mahukona (RA) 946-8262.

KAPAHULU. Holiday Parkway. 3 bedroom, 2 bath unit. 1199 sq. ft. Low maintenance includes utilities. \$115,000 (L) (40282)

Edie Wiltgen (R) 737-2007.

WAIKIKI. Tradewinds Plaza. 2 apartments, 1 bedroom, 1 bath each. Extra large lanai. Newly painted/new carpets. Excellent rental. \$59,950 ea. (L) (38174)

Joe Zimmerman (RA) 524-4843.

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

(Continued from page 391)

4. ENT Conference, first and second Fridays, 7:30-8:30 a.m., Harkness Room 139.
5. QMC-UH Medical Conference, Fridays, 8-9 a.m., Mabel Smyth Auditorium.
6. MICU Lecture, Mondays, Tuesdays, Wednesdays, and Thursdays, 9-10 a.m., Queen Emma Tower, Room 4B.
7. Neuro-Radiology Conference, Mondays, 8-9 a.m., Imaging Services classroom, first floor, Queen Emma Tower.
8. Ob/Gyn Conference, Mondays, 1-2 p.m., Kam Auditorium.
9. Ophthalmology Conference, fourth Tuesday, 4:45-6 p.m., Queen Emma Eye Clinic.
10. Orthopaedic Conference, Wednesdays, 7-8 a.m., Kam Auditorium.
11. Pathology Conference, Wednesdays, 7-8 a.m., Queen Emma Tower, fourth floor.
12. Pediatrics Conference, fourth Thursday, 12:30-1:30 p.m., Harkness Board Room.
13. Surgical Conference, Tuesdays, 4:30-5:30 p.m., Kam Auditorium.
14. Tumor Board Conference, Tuesdays, 7:30-8:30 a.m., Kam Auditorium.

St. Francis Hospital

1. Oncology Conference, Mondays, 7:30-8:30 a.m., Sullivan IV Classroom.
2. EENT Meeting, first Tuesday, 7:30-8:30 a.m., Sullivan IV Classroom.
3. Surgery Grand Rounds, first, second, and third Fridays, 7:30-8:30 a.m., Sullivan IV Classroom.
4. Medicine Morbidity and Mortality Conference, second Tuesday, 7:30-8:30 a.m., auditorium (for SFH staff members only).
5. Hematology Conference, third Thursday, 12:30-1:30 p.m., Sullivan IV Classroom.

6. Visiting Professor Programs (contact Medical Education Office at 547-6497 for further information).

Straub Clinic & Hospital

1. Friday noon Conference, Fridays, 12:30-1:30 p.m., Doctors' Dining Room.
2. Patient Care Conference, second Tuesday, 5-6 p.m., Doctors' Dining Room.
3. Cardiac Surgery Conference, fourth Tuesday, 4:30-5:30 p.m., Doctors' Dining Room.
4. Neuropathology Conference, fourth Saturday, 8-9 a.m., Doctors' Dining Room.
5. Surgical Morbidity and Mortality Conference, fourth Thursday, 7-8 a.m., Doctors' Dining Room.
6. Visiting Professor Conference, variable time throughout the month, Doctors' Dining Room.
7. Diabetes/Endocrinology Conference, first Wednesday, 12:30-1:30 p.m. Diabetes Center Conference Room, Palma 4.
8. Docs-on-Call Conference, third Wednesday, 7-8 p.m., Doctors' Dining Room.
9. Fluorescein Angiography Conference, third Thursday, 4:30-5:45 p.m., First Insurance Building, Room 950.
10. Fronk Clinic Educational Meeting, Variable monthly, 6:30-7:30 p.m., Fronk Clinic.
11. Video Conference, first Thursday, 12:30-1:30 p.m., Doctors' Dining Room.

For further information, call the Office of Professional Activities, 523-2311, ext. 8152.

Wahiawa General Hospital

1. CME Program, Tuesdays, 1-2 p.m., SNF Dining Room. For further information, call the Medical Staff Services Office at 621-8411.

Note: All conferences are subject to change. Monthly calendar is available upon request.

**WOULD
YOU GO
TO YOUR
DOCTOR
FOR
LEGAL
ADVICE?**

GUARANTEED FASTEST PROCESSING AND LOWEST AVAILABLE RATES.

- In-home or office consultation
- Processing of all applications and filings
- Arrangements for appraisal, escrow & other necessary legal matters
- Consultations with your accountants, attorneys or trust officers, if necessary
- Loan officers on call seven days a week

*Let us
Fill in the blanks*

RESIDENTIAL LOAN APPLICATION:

Borrower's Name		Address		City		State		Zip	
Occupation		Employer		Annual Income		Monthly Income		Assets	
Marital Status		Number of Children		Current Mortgage		Proposed Mortgage		Other Loans	
Credit History		References		Signature		Date		Loan Officer	

The Professionals in Real Estate Financing:

Residential Real Estate
Commercial Real Estate
Jumbo Loans
Conventional Financing
FHA/VA Financing
Second Mortgages



**PHOENIX
FINANCIAL
SERVICES**

1088 Bishop Street
Suite 1215
Honolulu, Hawaii 96813
PH: 538-0088

AIDS

(Continued from page 376)

- Lanette Shizuru, PhD 524-4899
Division Planner, Legislative
Liaison, Epidemiology Research
Contact
- Don Cowne 735-5303
CDC Adviser, AIDS Prevention
Program Coordinator (Counseling
and testing, Health Education)
- Rodrigo Gillara, MPH 548-5986
AIDS Surveillance and Reporting
Epidemiologist
- Janet Crawford 735-5303/524-4899
Public Information Officer
- Laverne Fuller, RN 735-5303
AIDS Clinic Supervisor/Diamond
Head Health Center and Outreach
Clinics

John C. Lewin, MD
Director of Health

Did you know?

Saint Francis Medical
Center is one of the
top three hospitals in
Hawaii . . . and the
fastest growing.

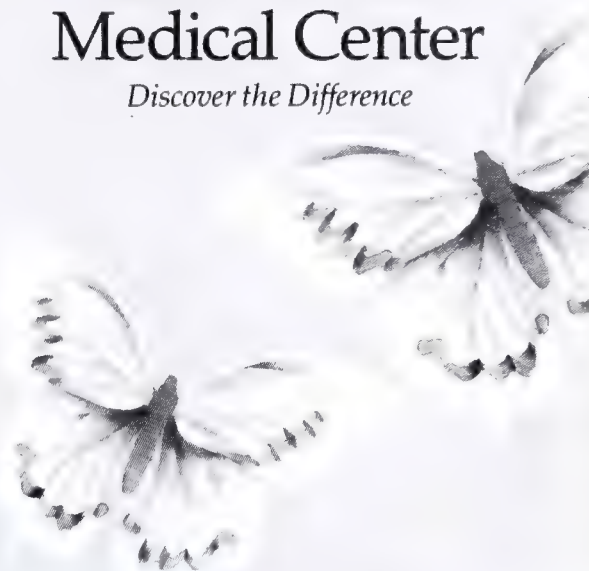
Leaders in quality
health care.

Serving people of all
faiths, beliefs, or
ethnic backgrounds.



Saint Francis Medical Center

Discover the Difference



"I just put more time in my day."

"If you're like me, time is your most precious commodity. And you probably spend 110% of it trying to be in three places at once."

"With a Honolulu Cellular Telephone, I can take the features and convenience of an office phone wherever I go. For a lot less than you might think."

"Now I can organize all my activities while I'm on the road. Talk with the press. Coordinate meetings. Even put together a bed race. And have more time to go the extra mile."

CAROLE KAI, Founder,
The Carole Kai International Bed Race

Honolulu Cellular Telephone Company



Hawaii's choice for quality cellular service

1161 Kapiolani Boulevard, Honolulu, Hawaii 96814 545-4765

ERICSSON

• PHYSICIAN • PHYSICIAN'S ASSISTANT

One of America's largest health care corporations is currently seeking full and/or part-time Physician and Physician's Assistant for our plasma donor center located in Honolulu.

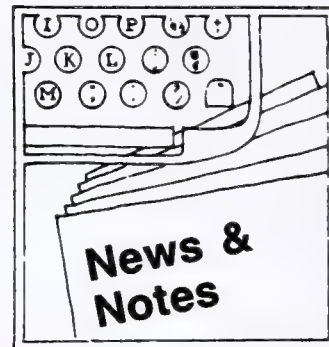
Responsibilities will include performing physicals in conjunction with donor screening and evaluation. We will consider licensed but non-practicing Physicians who wish to work on a consulting basis. Positions are for days only; no nights, evenings, Sundays, or call. Must have current license.

We offer an excellent work environment and highly competitive compensation including company-paid liability protection. For immediate consideration please send resume or apply in person to Center Manager

**Alpha
Plasma Center**
3179 Koapaka St.
Honolulu, HI 96819

Equal Opportunity Employer M/F

Alpha
THERAPEUTIC
CORPORATION



HENRY YOKOYAMA, MD

Charlie Judd

A DOCTOR'S DOCTOR . . . (Excerpts from Tom Whelan's heart-rending tribute to Charlie)

"This evening we are gathered to memorialize a unique and gentle person; a noble and beautiful human being, a man whose wife (who was also his office manager), often referred to as 'Mr. Write-off.' This was for the many fees he 'wrote-off' for his less fortunate patients — Charlie Judd.

"Charlie saw good in all people, and his ratings of those whom he interviewed for residency were always 4 or 5 out of a possible 5 points. It is my belief that he never failed a student. His greatest compliments were for those who had warmth and cared for his or her patients. I can still hear him saying, 'Well, that Joey, (or Judy, or Harry, whoever it happened to be at the time) really is caring and sensitive. He has heart. He will be a fine doctor.'

"I am representing and speaking for thousands of medical students, residents and colleagues who came to feel the charm, sincerity and dedication to teaching, of Dr Judd. This ceremony is appropriate, as it brings together two of his families, Queen's and the John A. Burns School of Medicine, and its residents and students who were a part of Charlie's extended family. They all loved him, and he loved them.

"Charlie is now at rest. We will all miss him immeasurably. Remember, however, that we did have the privilege of knowing him. People we have loved and who have loved us not only make us more human, but they become a part of us and we carry them around all the time whether we see them or not.

"Thank you, Charlie, for all you have given each one of us. Goodbye, old pal."

(Ed: Our apologies to Tom for using only part of his address . . . Nora Goldstein will include the entire address in the HMJ's forthcoming medical library edition dedicated to Charlie . . .)

Miscellany

Airline attendants were aghast to find a lady passenger's dog dead in its cage in the cargo compartment . . . To avoid a suit, they lied to the lady that her dog was on another flight. They hastily disposed of the dog's body and searched frantically for a look-alike till they found one . . . With great trepidation,

KOKUA

Kokua Nurses & Kokua HOME HEALTH AGENCY

Specialists in Private Duty Nursing,
Hospital and Office Staffing.

Licensed and Certified for
Medicare/Medicaid Reimbursement

RN'S • LPN'S • Nurses Aides
Medical Assistants
Travel Nurses • X-Ray &
Medical Technicians • Physical
& Occupational Therapists
Medical Social Workers
RN Supervision • Speech
Pathologists

Kokua Nurses

ON CALL 24 HOURS 536-2326
1210 Auahi Street



APPLICANTS WELCOME

they delivered the dog to the woman's home . . . Lady, severely: "That's not my dog" . . . The attendants were dismayed . . . "My dog was dead . . . I was bringing her home for burial . . ." (From Paul Harvey news . . .)

It was enough to make even Dr. Ruth blush . . . Freddie was finally apprehended for sexually assaulting two women 4 or 5 times a week for 7 years . . . Freddie was 75. . . . (Another Paul Harvey item)

Life in
These Parts II

In September, a 67-year old man with malignant ventricular arrhythmia became Hawaii's first to have an automatic implantable cardioverter defibrillator implanted . . . Straub surgeon Niall Scully performed the operation with cardiologist Edward Shen and a medical team . . . Ed, who did the diagnostic electrophysiologic study, said, "if the study shows malignant ventricular arrhythmia that will not respond to medication or surgery, the implantable defibrillator will be the best possible chance for a longer, healthy life. . . ."

Robert Gilkeson, teacher, pediatrician, adolescent neuropsychiatrist and brain researcher from the Psychoneurologic Research Center of Los Angeles was in Hilo lecturing that marijuana was retarding youth. Robert feels that American youth are being fed misinformation about marijuana being less harmful than other hard drugs, when actually Marijuana is more directly destructive of brain tissues . . . He says: "Marijuana makes great people average and average people dumb."

Governor John Waihee took his cabinet on the road, to Maui to listen to their problems. He got an earful . . . A Paia woman criticized the State's handling of a federal study on the dangers of living near burning sugar cane . . . "How do you know that burning cane isn't dangerous to the very young and the very old?" she demanded. . . . While the governor tried to explain that another study was being done, health director John Lewin stepped in: "If we love this place, we don't want to grow crops of condos — people are the most dangerous polluters of all. . . ." John explained that if sugar plantations couldn't burn cane, they would leave, selling the agricultural land for development . . . The Paia woman holding two toddlers said later: "At least I feel better now that I got that out of me. . . ."

Entrepreneurs . . .

St. Francis Medical Center has established yet another program called "The Family Institute," which offers family-oriented mental health care. Director Jing Hsu, Chief of Psychiatry at St. Francis, spearheaded the project. . . .

Kona-Kohala Health Care, a medical group consisting of 14 physicians in five specialties and currently operating out of two clinics in Kona, announced plans to build a new clinic



CONTINUITY-OF-CARE™

24 HOURS A DAY

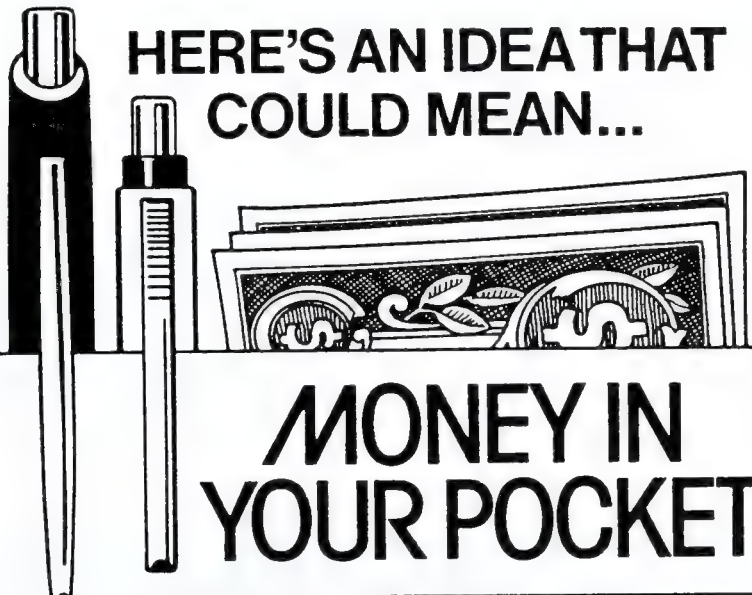
By combining your expertise and ours for complete patient care, our flexible Continuity-of-Care™ programs enable us to design the optimum home care program for you.

Hawaii's most complete homecare supplier



500 Ala Kawa Street
Honolulu, Hawaii 96817
845-5000

HERE'S AN IDEA THAT
COULD MEAN...



MONEY IN
YOUR POCKET

PEQEX
Inc.

We're here to serve you with a complete
selection of **new** and **used**
medical equipment and supplies.

Call
537-2724
831 Pohukaina St. C-3

One of our many items: Reproductions of Antique Porcelain



*From the Beijing branch of
China National Arts and Crafts*

We also have:

- African ivory from Elephant burial grounds, scrimshawed in Asia
- Antique Buddhas from the Shan State in Burma
- Antique Buddhas and Monks from Thailand (various periods)
- Kmer stone carvings 10th - 12th Century

Please call to ensure we are in the office.

TREASURES OF ASIA INC.,

SUITE 1007 EXECUTIVE CENTRE,
1088 BISHOP STREET,
HONOLULU, HI 96813 • TELEPHONE 537-3202

in the new Lanihau Center. . . .

In September, Kaiser Permanente Medical Care Program held an open house at their new Kona Clinic, Hualalai Medical Building.

Those who want to eat the "McDougall way" and have little time to cook, can now purchase five different frozen dinners at \$4.50 each prepared by John McDougall in his Kaneohe plant . . . The dinners conform to John's nutrition ideas, viz: Low in in fat, cholesterol, sodium and calories . . . Each meal contains a "prescription coupon" for a series of blood tests testing cholesterol, triglyceride, glucose and uric acid for \$15, and saves the customers the cost of visiting a doctor's office. . . .

Oops! Our Slip is Showing . . .

Notice in the Hawaii Tribune Herald: "Dr. John Orhara will speak on osteoporosis to members of the Big Island Chapter, Professional Secretaries International, etc, etc. . . ." (Ed: Ohara, the Japanese-Irish name sounds even more intriguing as Orhara. . . .)



STEPHEN R.P.K. BRADY, MD

PSYCHOTROPIC DRUG USE AND THE RISK OF HIP FRACTURE CAN LEAD TO SERIOUS PROBLEMS FOR THE ELDERLY—Fracture of the hip is a leading cause of illness, death and medical expense among elderly persons. In the United States, an estimated 227,000 osteoporotic hip fractures occur each year. The annual cost for this disorder approaches \$6 billion.

Data support the hypothesis that the sedative and autonomic effects of psychotropic drugs (those that act on the mind) increase elderly people's risk of falling and fractures, according to a study by Wayne Ray, PhD, et al., reported in the February issue of *The New England Journal of Medicine*.

Honolulu Orthopedic Supply

ORTHOTICS
PROSTHETICS
MASTECTOMY FITTINGS
ORTHOPEDIC SHOES
WHEELCHAIRS
WALKING AIDS

536-6661

1365 Nuuanu Avenue • Honolulu, Hawaii 96817

Researchers compared 1,021 Medicaid enrollees who suffered a hip fracture with 5,606 closely matched subjects in a control group. About 42% of the individuals in both groups were 85 years of age or older.

Four classes of psychotropic drugs were studied: short-half-life hypnotics-anxiolytics; long-half-life hypnotics-anxiolytics; tricyclic antidepressants; and antipsychotics. Researchers found that of the four classes, the long-half-life hypnotics-anxiolytics, the tricyclic antidepressants and the antipsychotics were each associated with an increased risk of fracture of the hip. The short-half-life hypnotic-anxiolytic drugs were not.

Stratifying subjects by the diagnosis of dementia (organic loss of intellectual and motor function) suggested that the dementia did not affect the association between the use of psychotropic drugs and the increased risk of hip fracture.

But the researchers did note that two properties of the three classes of psychotropic drugs with which an increase in hip fracture was associated could increase the risk of falling in elderly persons. Next-day sedative activity (associated with all three classes of drugs) can produce psychomotor impairment, and alpha-adrenergic blockade (a property of the antipsychotic and antidepressant drugs) increases the likelihood that the patient will be dizzy or even faint upon arising from a supine position.

The authors estimate that the use of psychotropic drugs was an appreciable contributing factor in hip fractures in 14 percent of the patients they studied. They urge further investigation of newer psychotropic drugs with fewer undesirable sedative and autonomic effects.

THE EFFECT OF FOOD ADDITIVES ON THE BEHAVIOR OF CHILDREN WITH HYPERKINETIC AND LEARNING DISORDERS—A study reported in the January issue of the *American Academy of Child and Adolescent Psychiatry* concluded that a diet that eliminates artificial additives and foods containing aspirin (the Feingold Diet) holds no advantage for most children with learning disabilities. Nor does it benefit hyperkinetic children who have responded well to medication.

Mortimer D. Gross, MD, and his colleagues studied 39 children for two weeks in a summer camp. The first week the children followed the Feingold Diet (no additives) and the second week a regular diet plus plenty of candy, soda, cake and the like.

All the children were classified by public school psychologists as having moder-



O.P.T.I.O.N. Care of Hawaii
A Home IV and Nutritional Service

QUALITY, COMMUNICATION AND EXCELLENCE IN INTRAVENOUS HOME CARE...

Our clinical Pharmacists and Registered Nurses are dedicated to quality patient care, timely communication and excellence in home I.V. Therapies.

O.P.T.I.O.N. Care® is a sound, cost-effective and rewarding alternative, offering your patients an option in health care they may not have considered possible.

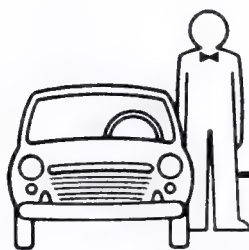
...WE'RE COMMITTED TO IT

For More Information **CALL 254-5841**

Pali Palms Plaza • 970 N. Kalaheo Ave., Suite C-106 • Kailua, Hawaii 96734

“I don’t have time to drop off my car for service — CarKeepers does. I never leave my office.”

Discover the
Complete Maintenance Program . . .



CARKEEPERS

the general practitioner for your car
533-1356



What Is The State of Your 1987 Taxes?

If you are an Hawaii resident, in 1987 you could pay up to 42.02% in taxes to the state of Hawaii and to the federal Government. (Based on the maximum 1987 federal tax rate of 38.5% and the Hawaii state tax rate as of 10/1/86.) Now is the time to take a close look at the tax advantages of Seligman Tax-Exempt Fund Hawaii Series!

The Series Offers:

- INCOME EXEMPT FROM FEDERAL INCOME TAXES
- INCOME EXEMPT FROM THE PERSONAL INCOME TAX OF HAWAII

It's Time to Choose a Professionally Managed
Double Tax-Exempt Bond Portfolio

INVESTIGATE SELIGMAN TAX-EXEMPT FUND
HAWAII SERIES

EFHutton

E.F. Hutton & Company Inc.

2500 Pauahi Tower, 1001 Bishop Street
Honolulu, Hawaii 96813
(808) 521-2961

Yes! Send me a prospectus which contains more complete information on Seligman Tax-Exempt Fund Hawaii Series including information about the sales charges and other expenses. I understand that I should read it carefully before I invest.

MAIL THIS COUPON OR CALL 521-2961 TODAY!

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

DAYTIME PHONE _____ HOME PHONE _____

6 87

ate to severe learning disorders. The behavior of all children was monitored by videotape for four-minute intervals at mealtime. No significant differences were found in behaviors during weeks one and two. The researchers also noted that the diet was "distasteful to the typical American child."

The authors cited a study by Williams and Cram (1978) who postulated why the Feingold Diet may be so attractive — to parents, at least. "(1) It offers an alternative to drugs; (2) it alleviates the guilt parents have felt by shifting the blame from family to the food industry; (3) it removes the blame from the schools; (4) it fits the growing consciousness about ecology and pure foods; (5) it enables the parents to control the diet of the child, thus permitting them to become the primary therapeutic agents."

Gross cites the Consensus Development Conference on Defined Diets and Childhood Hyperactivity, which concluded that "The Feingold Diet may be helpful for a small number of children with hyperkinesis. . . . However, these decreases in hyperactivity were not observed consistently."

THE W.K. KELLOGG FOUNDATION ANNOUNCES THE AVAILABILITY OF KELLOGG NATIONAL FELLOWSHIP AWARDS FOR 1988—Initiated in 1980, the program is designed to prepare leaders who can function effectively and knowledgeably in dealing with complex problems where narrow expertise is not sufficient. It seeks to involve professional men and women in the earlier years of their careers who are interested in developing interdisciplinary and cross-cultural perspectives on contemporary human and social problems.

The Fellowship awards will be made on behalf of up to 50 individuals of exceptional merit and competence who have exhibited leadership potential in their community, organization, or profession. To be eligible for the three-year program, an applicant must be a U.S. citizen, accept responsibility to participate in *ALL* activities related to the program, and receive 25% released time from his/her employer to carry out a non-degree, self-directed learning plan to expand personal horizons beyond the confines of a chosen profession. Individuals employed in both the non-profit and for-profit sectors may apply.

In addition to completion of the learning plan, Fellows must attend seven seminars sponsored by the Foundation, one of which is a two-week seminar in Latin America, all others are one-week semi-

**We'd like to introduce you to the newest spokesman
for the American Heart Association.**

Just as soon as he's born.

The same baby who, ten years ago, wouldn't have lived to speak his first word. But now doctors can look inside the hearts of unborn babies, detect disorders and correct them at birth. Thanks to research, he can have a healthy, normal life.



American Heart Association

WE'RE FIGHTING FOR YOUR LIFE

nars conducted in various cities in the U.S. Attendance is required at *ALL* seminars.

The award includes \$35,000 for the development and completion of the learning plan and \$5,000 to be used *only* for travel expenses incurred while participating in required seminars. In addition, 12.5% of the Fellow's salary, up to \$20,000 over the three years, will be reimbursed to the sponsoring/employing institution. Fellows not employed by a non-profit organization are not eligible for the salary reimbursement; however, in certain cases a monthly stipend of \$300 may be available.

The deadline for applications for this program is Dec. 18, 1987. For more information, contact: Applications, Kellogg National Fellowship Program, W.K. Kellogg Foundation, 400 North Ave., Battle Creek, Mich. 49017-3398, Telephone: 616/968-1611.

SPECIAL TWO-YEAR CLINICAL TRIAL OF TETRAHYDROAMINO-ACRIDINE (THA)—The study on THA, an experimental drug that may help control memory loss in some patients with Alzheimer's disease, will be funded by the National Institute on Aging in cooperation with the Alzheimer's Disease and Related Disorders Association and the Warner-Lambert Co.

In the clinical trial, a group of independent investigators from research facilities across the country will measure the safety and efficacy of THA by testing the drug in approximately 300 Alzheimer patients. In all, the trial will involve more than two dozen investigators at 17 different sites.

Experts in the field are cautiously optimistic about THA's potential as a treatment for Alzheimer's disease. However, THA is not expected to stop or reverse the disease's devastating course. The drug may modify the symptoms of the disease by blocking the brain's normally fast breakdown of acetylcholine, a chemical messenger that seems to be involved in memory. But as Alzheimer's disease progresses, brain cells die.

THA, or any drug of this kind, can work only as long as there are enough living cells to produce needed levels of acetylcholine, which is just one of several chemical messengers affected by the disease.

If the results of this clinical trial prove favorable, it is expected that the data will be submitted to the Food and Drug Administration for marketing approval, and that the drug will be developed and released to the public.

STEER YOUR MEETINGS ONTO A NEW COURSE



Have your meetings veered off track lately? Does brain storming stir up more dust than fresh ideas?

Hold your next mid-week meeting at the Sheraton Makaha. We're an hour and a world away from the pressures from downtown. Our meeting rooms can accommodate groups from 3 to 300 and our catering staff will supply the coffee and donuts, a "power brunch" or an executive picnic.

Wrap up your session with 18-holes of golf at Makaha's Sheraton West, or enjoy tennis or horseback riding. Discounted rates apply. And a hospitality room is provided for showers and changing.

So, pull your meetings out of their trap. We'll provide the setting for you to really drive home some great ideas.

Call 695-9511 for reservations.



**Sheraton Makaha
Resort & Country Club**

84-626 MAKAHA VALLEY ROAD
OAHU, HAWAII 96792 808-695-9511

The hospitality people of **ITT**



Owned by ANA and operated by Sheraton

If you do business in Hawaii . . .

and want to keep on top of civil cases in our courts, or tax liens, public hearings, incorporations and partnerships, or almost anything else of value in your practice

. . . we have news for you



**PACIFIC
BUSINESS
NEWS**

For information call 521-0021.

A MATTER OF TRUST.

You've worked hard to accumulate the money you have...and now it's time to look ahead.

You want to put the funds you've earned in hands you trust. Where they will receive the benefits of conservative, professional management—yet be available when you need them.

And when these funds pass on to your family, you want that transition to be equally professional—without the delays and unnecessary expense of public court probate.

This is why First Hawaiian Bank has created Asset+Plus, a new trust service from Hawaii's first full-service trust bank. You can start your Asset+Plus account with as little as \$50,000 in liquid assets.

For details with no obligation, ask about Asset+Plus at any First Hawaiian branch, or by phone at 525-6140 in Honolulu.



NOVEMBER 1987
VOL. 46, NO. 11

Hawaii Medical Journal

CONTENTS

- | | |
|---|--|
| FROM THE DIRECTOR OF HEALTH 408
John C. Lewin, MD | CONTINUING MEDICAL EDUCATION 414 |
| EDITORIALS: 412 | COMMUNITY LONG-TERM CARE FOR 417
GERIATRIC PATIENTS IN HAWAII |
| Planning For Long-term Medical Care | Kathryn L. Braun, DrPH |
| J.I. Frederick Reppun, MD | Joseph W. Humphry, MD |
| Communication | Janice M. Kaku, MSW |
| J.I. Frederick Reppun, MD | COST-EFFECTIVENESS IN A 426
FRAIL AND ELDERLY POPULATION |
| Congratulations | Harry Lee, MD |
| J.I. Frederick Reppun, MD | AN ALTERNATIVE APPROACH TO CARE FOR THE 428
FRAIL, VULNERABLE ELDERLY IN HAWAII |
| | Laura Jean C. Armstrong, RN, C, BSN, GNP |
| | Constance M.L. Chock, RN, C, BSN, GNP |
| | NURSING HOME POPULATIONS, 433
THEN AND NOW |
| | Abe Sakai, MPH |
| | CASTASTROPHIC HEALTH INSURANCE 434
Gladys C. Fryer, MD |
| | LONG-TERM CARE, MEDICARE, 436
MEDICAID AND ALTERNATIVES: A REVIEW |
| | Earl W. Fedje, STM, CLU, ChFC |
| | ON LONG-TERM CARE INSURANCE 440
Stanley B. Snodgrass |
| | HMA COMMITTEE REPORTS: 442
From the Chronic Illness
and Aging Committee |
| | NEWS & NOTES 444
Henry Yokoyama, MD |
| | HONORING KENNETH HALING, MD 448
Helen S. Percy, MD |
| | COUNCIL CAPERS: 452
AUGUST 1987
Denis J. Fu, MD |

Hawaii Medical Journal
UCSF LIBRARY
November 1987

H · 1856 · NC

UCSF LIBRARY
SERIALS DEPT
257 MED SCIENCES BLDG
SAN FRAN, CA 94143-0840

FOR GREATER PROFITS AND LOWER RISK...

INVEST GLOBALLY!

with the DOHMEN CAPITAL MANAGEMENT PROGRAM



ENHANCE INVESTMENT OPPORTUNITY

Fact! The U.S. stock market has been in one of the biggest bull markets in U.S. history. In 1986 alone, the DJIA gained an impressive 27.1%. Yet it ranked only number 15 in performance worldwide.

Only once in the past 10 years has the U.S. been the top performing market. Therefore, if your money manager has limited your investment portfolio to only the U.S. you've missed excellent opportunities while being exposed to greater risk.

REDUCE RISK

Not to consider global investment diversification is virtually imprudent. Just as you wouldn't put your assets into a single stock, investors should not invest only in a single country. Trade and economic factors can drive one country down while another market is on the rise. By investing globally, you reduce risk through "double diversification"--by company and by country, avoiding markets where risk has increased substantially and concentrating on those with the best risk/reward ratios.

GLOBAL DIVERSIFICATION DEMANDS EXPERTISE

Unlike most asset management firms, global diversification is an integral part of WELLINGTON CAPITAL'S overall investment strategy. By using top performing domestic and international mutual funds, coupled with our proprietary computer based system, BERT DOHMEN, President of WELLINGTON CAPITAL, and his team are able to diversify internationally in markets that offer the greatest potential for gain, while avoiding those with the highest risk.

**IF YOUR CURRENT INVESTMENT PROGRAM IS NOT
DIVERSIFIED INTERNATIONALLY, INQUIRE NOW ABOUT
WELLINGTON CAPITAL'S GLOBAL ADVANTAGE.**

No affiliation with Wellington Fund
or Wellington Management Company.

**Minimum Portfolio:
\$500,000**

Please send me information concerning the
DOHMEN CAPITAL MANAGEMENT PROGRAM
Wellington Capital, Inc.

733 Bishop Street, #1800, Honolulu, Hawaii 96813 (808)524-8063

Name _____
Address _____
City _____ State _____ Zip _____ Phone _____

PBNP 04 11/87

WELLINGTON
524-8063

HAWAII MEDICAL JOURNAL

(USPS 237-640)

Published Monthly for the
HAWAII MEDICAL ASSOCIATION
(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD
Founding Editor: HARRY L. ARNOLD JR., MD
News Editor: HENRY N. YOKOYAMA, MD
Assistant Editor and Book Review Editor:
DOUGLAS G. MASSEY, MD
Contributing Editors: STEPHEN R.P.K. BRADY, MD,
FRANCIS H. FUKUNAGA, MD,
Managing Editor: CHARLOTTE BEAL
Editorial Assistants: BECKY KENDRO
Copy Editor: GWENDOLYN CHANG HULLEMAN
Graphic Artist: J. CHARLES DAVIS
Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,
THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,
JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD
(Commissioner)
HENRY N. YOKOYAMA, MD
(Chairman)

STEPHEN R.P.K. BRADY, MD,
NATHANIEL P.H. CHING, MD,
FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,
JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,
JAMES P. MCGUIRE, MD,
DAMKERNG PATHOMVANICH, MD,
ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,
J.I. FREDERICK REPPUN, MD,
TERRY C.Y. WONG, MD,
SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD
President-Elect: JAMES LUMENG, MD
Past President: RUSSELL T. STODD, MD
Secretary: JOHN H.C. KIM, MD
Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD
Honolulu: JOHN T. McDONNELL, MD
Kauai: THOMAS GROLLMAN, MD
Maui: HELEN S. PERCY, MD
West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD
CALVIN C.M. KAM, MD
Alternate Delegates to AMA
WALTER W.Y. CHANG, MD
RUSSELL T. STODD, MD

Advertising Representatives

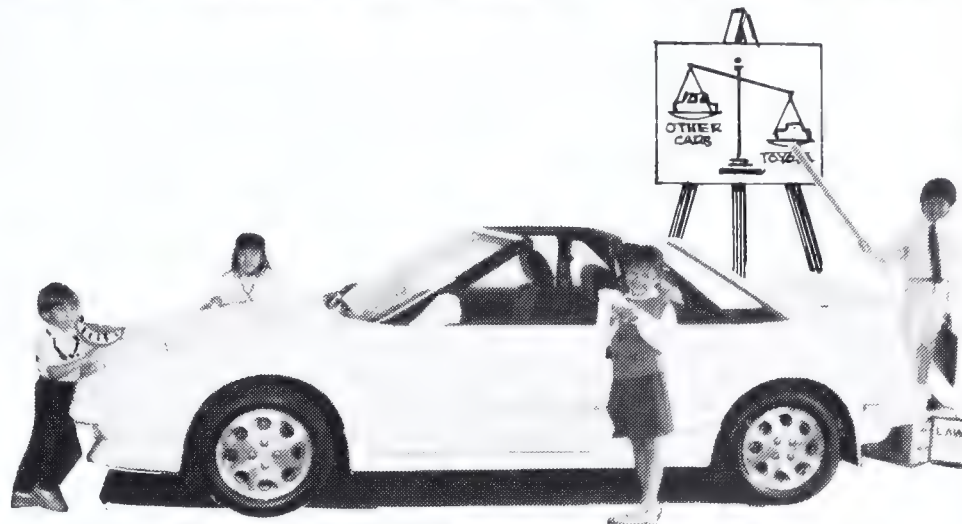
CROSSROADS PRESS, INC.
Post Office Box 833
Honolulu, Hawaii 96808
Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.
16 Bruce Park Avenue
Greenwich, Connecticut 06830
Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.

BY PROFESSIONAL STANDARDS ONLY...



TOYOTA

EXCELLING EVEN FURTHER, TOYOTA 1988 PRESENTS... SUPERCHARGED MR2!

FOR THE "LITTLE KID" IN YOU!

According to Road & Track Magazine's October Issue:

This is one truly super engine. It's smooth, flexible, instantaneous in response and progressive all the way. The supercharged MR2 is fast. You don't wait for acceleration and you never seem to run out of it. The MR2 reaches 60 mph in 7.0 seconds and never looks back, passing 100 mph before the sweep second hand touches 20.

The MR2 has such superior steering and road feel that the average driver can go much quicker with confidence. Add its superiority in braking and fuel mileage, and the MR2 dominates in performance.

A Supercharger has rarely been engineered and refined for production car usage and is a first for Toyota in the U.S. market.

This new supercharged engine, designated the 4A-GZE, provides a 40% increase in torque and a 30% increase in horse power.

ASK US ABOUT OUR **BUSINESS LEASING PROGRAM**. It's an attractive alternative to purchasing.

**GET A SUPERCHARGED EXPERIENCE,
VISIT YOUR TOYOTA DEALER TODAY.**

• **KAILUA TOYOTA**
Kailua Ph. 261-3321
• **KAIMUKI TOYOTA**
Kaimuki Ph. 735-1737
• **KAUAI TOYOTA**
Lihue Ph. 245-6978

• **TOYOTA CITY**
Moanalua Gardens
Ph. 834-1402
• **MOTOR IMPORTS**
650 Kapiolani Ph. 526-2688

• **WAIPAHU TOYOTA**
Waipahu Ph. 677-3161
• **WAIHAWA TOYOTA**
Wahiawa Ph. 622-4195
• **WINDWARD TOYOTA**
Kaneohe Ph. 235-0068

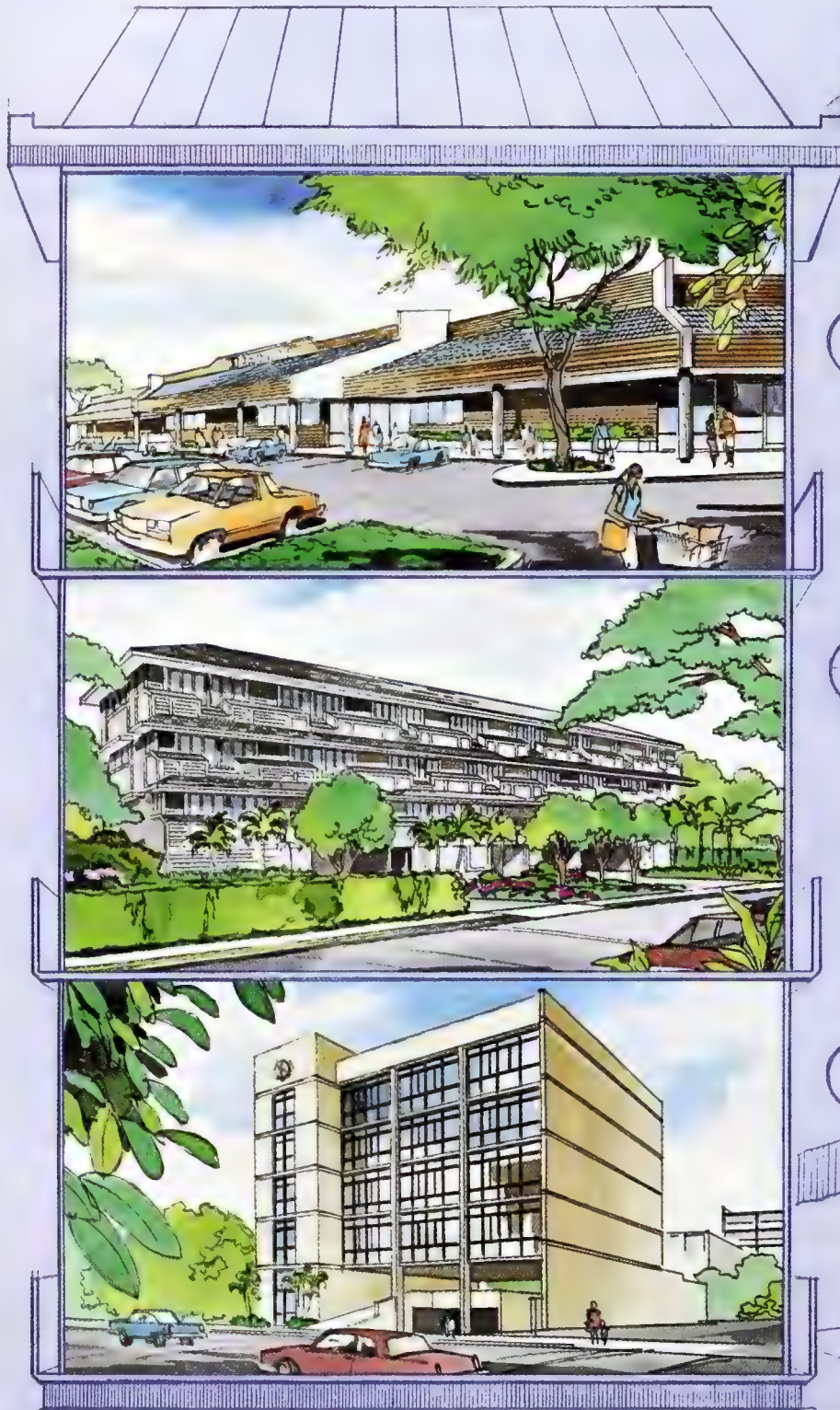
DIVISIONS OF SERVCO PACIFIC INC. 

SUCCESS STORIES

Every commercial project has a different story. There are 50-story towers. And 1-story office buildings.

But when it comes to financing, some things remain constant. Like First Interstate Bank. You can always count on us for personal service. Flexible terms. Competitive rates. Quick approvals. And, we can draw on the strength of First Interstate Bancorp.

For more information, call Robert Okubo at 525-7837, or Jim Wayman at 525-7815. In the meantime, take a look at a few of our success stories.



1. Windward Town & Country Plaza Shopping Center, with 55,000 square feet of leaseable area. The project has been appraised for \$8,135,000.

2. The Residence at Punahou, a condominium project consisting of 19 two-bedroom and 4 one-bedroom units. The project has been appraised at \$2,432,000.

3. Hawaii Medical Association Building, a 22,400 square foot, four-story office building. The property has been appraised at \$3,260,000.



*"I can alert
40 salespeople with
one phone call."
(that's efficient)*

*"Keeping
our service personnel
on schedule
would be impossible
without TeleMessenger."
(that's productive)*

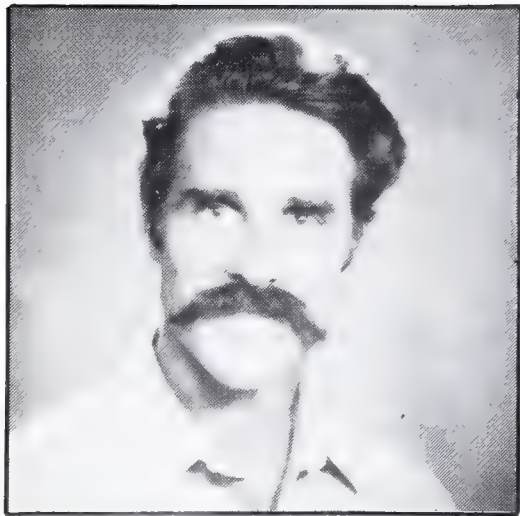
Listen to what other people have to say on TeleMessenger.

*"When I have an
important message for
our mainland offices,
it doesn't matter if the
Boston branch
has closed for the night."
(that's beating the time zone)*

*"I used TeleMessenger
to send the
information that closed
the sale —
while I was away on
vacation."
(that's good business)*

Call 545-1800 and learn what TeleMessenger can do for you.

HAWAIIAN TEL GTE
SPECIALIZED COMMUNICATIONS DIVISION
Beyond the call



FROM THE DIRECTOR OF HEALTH

New State Laws on Smoking and Tobacco in Hawaii

We are pleased that the 1986 Legislature passed three laws controlling the smoking and sale of tobacco. The use of tobacco has been one of our greatest public health problems, both nationwide and in Hawaii, and studies have shown that restrictive legislation helps decrease both the amount of smoking and the number of smokers. [Our latest figures from the Department of Health's (DOH) Behavioral Risk Factor Survey showed Hawaii to have 24.7% adult smokers — a decrease from the 25.5% figure in 1984 — comparable with other states, but yet far from the Surgeon General's hope for a "smoke-free society" by the year 2000!]

Smoking-related deaths in our state last year numbered 6,171 (from DOH Office of Research and Statistics), up slightly from the previous year's 6,116. But figures from our Health Surveillance Studies show an increasing morbidity of heart disease, bronchitis, and emphysema, all smoking-related conditions, over the last two years (from 35,923 to 39,570).

Since one of the conclusions of the *1987 Report of the Surgeon General* was that involuntary inhalation of smoke is a cause of disease, including lung cancer, in healthy non-smokers, it is as important for us to reduce exposure to environmental smoke as it is to encourage people to stop smoking.

The three newest laws on smoking are: Act 23—Smoking in Public Places, Act 245—Smoking in the Workplace and Act 293—Sale of Tobacco. The first two are concerned with restrictions on smoking, and the third with the sale of tobacco products to minors. In addition to these new laws, there are already in effect two county ordinances that address "Smoking in Public Places" — City & County of Honolulu and Hawaii County, respectively. Where the state and the county restrictions differ, the stricter provision prevails.

Act 234 went into effect Sept. 20, 1987, while Act 245 became effective two days later, on Sept. 22, 1987. Act 293 goes into effect Jan. 1, 1988.

The following is a summary of these laws and ordinances:

SALE TO MINORS: Act 293 prohibits the sale of any tobacco product to a minor under 18 years of age (current law states age

15). Signs must be posted at vending machines or wherever tobacco products are sold.

(In the following laws, smoking is defined as inhaling or exhaling the fumes, or burning, or carrying any lit cigarette, cigar or pipe.)

PUBLIC TRANSPORTATION: (Public buses exist only on Oahu.) No smoking is allowed on public buses, and no smoking in taxis while carrying non-smoking passengers.

ELEVATORS: No smoking is permitted in any elevator used by the public, including in apartment buildings.

HEALTH CARE FACILITIES: (both public and private, includes hospitals, clinics, and offices of physicians and dentists.) No smoking is permitted in semiprivate rooms, wards, waiting rooms, lobbies, and public hallways. Smoking is permitted in private or semiprivate rooms if there is no objection by other patients occupying the room. (Note: Hawaii County Ordinance even prohibits smoking in private and semiprivate rooms.)

MUSEUMS, LIBRARIES, AND GALLERIES: Smoking is prohibited in these.

CONFERENCE ROOMS AND MEETING ROOMS (IN STATE- OR COUNTY-OWNED OR CONTROLLED BUILDINGS): Smoking is prohibited.

ENCLOSED AUDITORIUMS OR SPORTS AREAS (IN STATE- OR COUNTY-OWNED OR CONTROLLED BUILDINGS): Smoking is prohibited.

ENCLOSED COMMUNITY CENTERS used for meetings, parties, etc. (in state- and county-owned or controlled buildings): Smoking is prohibited.

SERVICE COUNTERS, RECEPTION OR WAITING AREAS, AND ALL AREAS OPEN TO THE PUBLIC: (in state- and county-owned or controlled buildings): Smoking is prohibited.

BANKS, SAVINGS AND LOANS, INDUSTRIAL LOAN COMPANIES, AND CREDIT UNIONS: Smoking is prohibited.

(Continued on page 411)

AT LAST.

A cure for
the high cost
of medical
malpractice
coverage.



Our 350 physician-members agree that PIP has decreased their annual medical malpractice costs up to 75 percent.

Let us help you with your medical malpractice concerns. Contact us today for more information. It's good to have a choice . . . It's great to make the right one.

The Hawaii Association of Physicians for Indemnification (HAPI) offers a doctor owned, tax-deductible malpractice protection plan to qualified physicians and surgeons practicing in the state of Hawaii.

HAPI's Physicians' Indemnity Plan (PIP) can provide you with \$1,000,000 of medical malpractice coverage.

Norman J. Slaustas
Administrator, HAPI and PIP
735 Bishop Street, Suite 311
Honolulu, Hawaii 96813
(808) 538-1908

PIP
Physicians' Indemnity Plan
HAPI
Hawaii Association of
Physicians for Indemnification



THE MOST EXCITING NEW CAR IDEA OF 1988 HAS NO WHEELS.

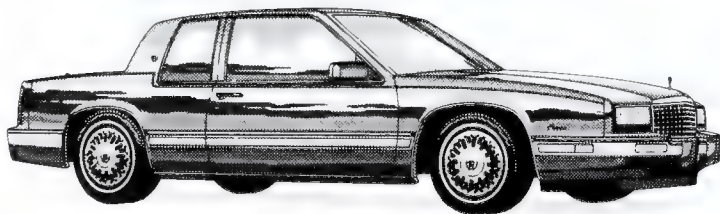
INTRODUCING SCHUMAN'S GOLD CARRIAGE SERVICE

A service so revolutionary you can't buy it from any other dealer. But, it's yours with every '88 Cadillac or Buick from Schuman Carriage.

It's a simple idea.

Instead of driving your car in to us for service, we come to your home, office or anyplace on Oahu.

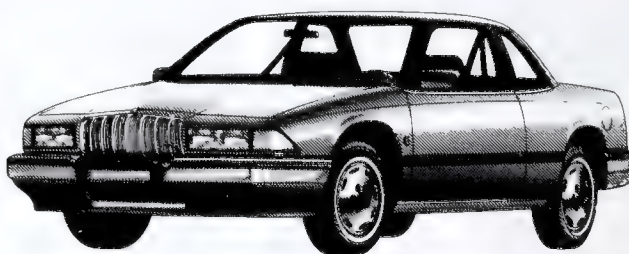
INTRODUCING THE 1988 CADILLAC ELDORADO:
THE CADILLAC OF CADILLACS.



Our pickup and delivery service is the first of its kind in America, and it's yours for one full year.

24-hour emergency service and warranty service reminders are also part of Schuman's Gold Carriage Service.

INTRODUCING THE 1988 BUICK REGAL:
NOTHING ELSE LOOKS AS REGAL.



After all, your car shouldn't run your life.

Avoid waiting in service lines. One full year of Gold Carriage Service is yours with the purchase of every 1988 Cadillac or Buick from Schuman Carriage. Ask us for full details.

**SCHUMAN'S
GOLD
CARRIAGE
SERVICE**

The Cadillac of customer service



SCHUMAN CARRIAGE CO.
The Cadillac of car dealers.

1234 Beretania Street • Phone 533-6211 • Monday-Friday 8:30 a.m.-9:00 p.m. • Saturday 8:30 a.m.-5:00 p.m.

HEALTH DIRECTOR

(Continued from page 408)

RESTROOMS: (state and county government and private, open to the public): Smoking is prohibited.

RETAIL STORES: with 5,000 or more square feet of floor space, and with six or more employees per shift: Smoking is prohibited. (Note: Hawaii County has no limitation regarding size of floor space. The Honolulu City & County ordinance specifically prohibits smoking in food and grocery stores, drug stores, and supermarkets.)

RESTAURANTS: If seating 51 or more (41 or more in Hawaii County), restaurants must provide non-smoking areas in proportion to number of non-smokers, and located so as to minimize drifting smoke. The entire restaurant may be designated as non-smoking if the owner wishes. If non-smoking areas have been designated, a sign to the effect that the entire establishment is a *smoking* area must be posted conspicuously at all public entrances.

AIRPORTS (STATE): Smoking is prohibited in waiting areas, baggage claim areas, and check-in counters within buildings.

GOVERNMENT OFFICES: Each state and county agency has been mandated by law (Act 245) to have and to enforce a policy that will, in effect, protect the rights of the non-smokers in the workplace. DOH is the coordinator for this act.

ENFORCEMENT AND FINES: (Act 234—Smoking in Public Places) are by each respective jurisdiction. Police may issue summons, or may eject the violator. Fines are up to \$20. Act 245—Smoking in the Workplace is to be enforced by the Director of Health and calls for a fine of \$500 a day against the agency

for not having a policy, or for not enforcing it. Act 293—Sale of Tobacco is to be enforced by police in each respective jurisdiction. Fines are from \$100 to \$1,000 for the dealer, and \$10 to \$50, or community service, for the underaged buyer.

As physicians, we must all remember that we are the exemplars for the lay public. We must continue to educate those who seek our advice, and inform them that smoking is harmful both to the smoker and to those around them. We must also set an example by prohibiting smoking throughout our own offices and even our buildings, if possible. (Act 234 states that smoking shall be prohibited "in semiprivate rooms, wards, waiting rooms, lobbies, and public hallways of public *and private* health-care facilities, including, but not limited to, hospitals, clinics, and physicians' and dentists' offices.")

I have appointed Kleona Rigney MD as resource person to assist with interpretation of these laws, as well as to help state and county agencies in fulfilling their legal requirements as stated in Act 245. As chief of our Chronic Disease Branch for many years, she has been instrumental in developing policy on smoking restrictions for our own department. Questions regarding the new laws may be directed to her at 548-5835.

HMA played a most helpful role in effecting passage of these three bills (especially the convincing testimony of Dick Lundborg MD!). With the new legislative session fast approaching, we look forward to again working together to strengthen the present laws, as well as in promoting others, such as increasing the tax on tobacco products.

John C. Lewin MD
Director
Department of Health

Maybe You Should Get a Second Opinion.

Most doctors don't advertise. But there's one form of advertising you can't afford to overlook: yellow pages. The fact is, 83.4% of all adults use the yellow pages when they need professional services. And 84% of all yellow page references are followed by action - a visit, a phone call or a letter.*

That's why you need Island Directory.

Yellow page advertising allows you to tell consumers about your professional affiliations, areas of specialization, business hours and more.

Island Directory is becoming the choice for advertisers because more consumers are using it. Our directory provides special features such as a 4-color fold-out map, complete civic section, zip code guide, government section and much more. And Island Directory's rates are up to 50% lower than the utility company's.

Call or write for more information.

People are turning to



*Source: 1982 Simmons Market Research Bureau report

Island Directory Company 1600 Kapiolani Blvd. Suite 600 Honolulu, HI 96814 (808) 955-8414

Serving the islands of Hawaii, Oahu, Kauai and Maui.



Planning for Long-term Medical Care

This issue of the JOURNAL is devoted to articles on a geriatric subject that we all, our patients and we doctors alike, need to address. Attention to it is long overdue. It is in the national forefront, as the Congress and the Administration have made it a priority item for federal legislation.

First of all, after 22 years of Medicare and nearly as many years of experience with Medicaid, the nation needs to come to grips with the shortcomings of these social welfare programs, and to become aware of the large "gaps" in coverage facing an increasingly elderly, "graying" society.

The articles herein will elucidate the problem. Some of the authors will detail a multiplicity of suggested remedies as well.

The overall problem facing the aging ill and disabled in our midst is that it will become increasingly difficult for families to care for their own at home, and that institutionalization will become more and more a fact of societal life. The problem lies in how to pay for quality care as modern, sophisticated medicine prolongs life ever closer to age 100 despite the inexorable decrepitude of the aging process.

Families will be hard put to be paying an average of \$22,000 (in today's dollars) per lifetime domiciliary care in a nursing home for each loved one. The government — i.e., all of us taxpayers combined — will be recalcitrant about taking on the burden. The current administration's Bowen bill, designed to fund the care of catastrophic illness and injury of those 65 and over, does *not* cover long-term nursing-home care.

We as a society, we as physicians concerned about our patients, need to address and to help plan a preparatory scheme or schemes of financing the care of the aged infirm.

With this issue of the JOURNAL we initiate a new section: *HMA Committee Reports*.

The suggestion was made by former HMA President Sam Allison, who felt the membership needed to know, through its house organ, what is happening "in committee" on a current basis and not only once a year when committee reports are made and delivered to the House of Delegates.

Commissioners and committee chairs are hereby advised that this section of the JOURNAL is available to them for publication of matters of importance, even before recommendations are submitted to the Council. This will allow for comment from, and wider participation by, members who are not on the committees.

In this issue we feature reports from the Chronic Illness and Aging Committee and from Dr. Gladys Fryer, who provides a summary of guest speaker Thomas Burke's talk on Catastrophic Health Insurance.

For those who are interested, we refer you to the July 2, 1987, issue of the NEJM, Vol. 317, No. 1, pp. 23-29, which offers an excellent article by Anne R. Somers of the Robert Wood John-

son Medical School. She has defined medical care's goals and definitions as follows:

"I suggest that the overall goals of medical care in the United States are to enable the people to stay healthy and functionally independent as long as possible; to provide access to good preventive, short-term, recuperative, and rehabilitative services as needed, to good long-term care for the management of serious chronic disease and disability, and to good supportive services when disease is terminal; to encourage as much patient autonomy and responsibility as possible, with care provided in the least restrictive and most cost-effective and appropriate environment and with continuity of management and records; and to encourage professional, educational, research, and financial activities and institutions essential to the above."

We hope this special issue of the JOURNAL will generate serious thought on the part of the many, and not just by a few.

J.I. Frederick Reppun MD
Editor

Communication

Currently, in the daily papers, one reads the arguments for and against the use of pidgin in our public schools. As much as we are advocates of the use of proper English — our nerves grate over a split infinitive or a dangling participle — a good word can be said for the presence of pidgin as a second language. It allows for communication and understanding with the least expenditure of effort — but only between the two or more people who are versed in that peculiar dialect.

Venerable English has been preserved pretty much inviolate, with new words or new aberrations entering the language little by little. Examples: The noun "impact" has been made into a verb (the Exocet missile impacted the USS Stark); "ongoing" rather than "continuing"; "maximizing" rather than "making maximum use of" (previously, only "minimizing" was in common usage).

Other languages have simplified their written forms considerably. We have in mind Russian, which hardly ever uses the symbols for soft and hard sounds anymore; Japanese has three levels in order to make it easier for its people to be literate.

Although our sensibilities rebel against some of the yuppieisms (an expressive new term!) that have crept into vogue since World War II, we do admit that they serve a purpose, and that purpose is to simplify communication.

The language of medicine, on the other hand, tends to remain conservative; in fact, as in law, it is too often verbose and redundant, attempting to cover all eventualities.

We think it is high time we simplify matters, but without sacrificing meaning.

We once enjoyed an interchange with HMJ Editor-emeritus Harry L Arnold Jr MD (please note that the spaces in his name serve eloquently in lieu of punctuation, and without loss of clarity!).

HMJ: "Harry, why do we write a.m. and p.m. when 9 a and 9 p would do just as well?" (Actually, the military 0001 through 2400 is simpler!)

HARRY: "I'll go you one better. Why write Honolulu, Hawaii, 96813, when 96813 all by itself should tell the USPS where to deliver that piece of mail?"

As for the latter, we are not that brash, yet, but we see no benefit in inserting "Hawaii" or "HI" in addressing intra-Hawaii correspondence.

Some readers may have already noticed that the references following many medical articles nowadays list authors as HL Arnold Jr MD, rather than H period L period Arnold comma Jr period comma M period D period; even the space between his initials has been obliterated.

The readers of the JOURNAL are warned to be aware that we have started down that road and that our intent is to pervade its contents with such simplification without sacrificing clarity of meaning. This will be a rather gradual process, because it is incredibly difficult to teach an old dog new tricks, and all conservatives die hard.

Just imagine how much time (time = dollars), energy and space will be saved by all the many people at the conveyor belt

between receipt of "hard copy" drafts and the final glossy product if we do this!

J.I. Frederick Reppun MD
Editor

Congratulations!

. . . to Diane Nakagaki RN ET of Kaiser Permanente Medical Center on Oahu for winning the 1988 Mana'olana award, and to William J. Sleeman RN for being the runner-up.

The awards were presented at Washington Place by Mrs. John Waihee, wife of the governor, on Wednesday, Sept. 16, 1987, at a tea.

The winners were chosen from among 10 nominees for the award of the Hawaii Pacific Division of the American Cancer Society. This was initiated in 1972; since then 130 nominee/participants have competed as "the nurse of hope." RNs and LPNs on oncology services are nominated for the award annually.

J.I. Frederick Reppun MD

THE HAWAII MEDICAL JOURNAL Extends a Big Mahalo to THE QUEEN'S MEDICAL CENTER For Supporting This Special Issue on Geriatrics

THE QUEEN'S HEART INSTITUTE

Wellness Services

The Queen's Heart Institute offers a full range of services for heart patients and their families. The medical center's wellness services include diagnostic tests such as coronary-risk appraisal and body-composition analysis, which help identify risk factors for heart problems, and educational programs such as "Health Fit," "New Weigh," "Smokeless" and "Life Enhancement" to keep your patients healthy.

Coronary Risk Appraisal

Coronary Risk Appraisal evaluates an individual's risk of coronary heart disease (heart attack) based on personal and family history of diabetes, heart disease, personality, body fat, blood pressure and blood sample.

The appraisal requires two visits. On the first visit a computerized body composition analysis is performed, a health history taken, as well as blood sample, blood pressure and height and weight. Individual results are then reviewed in a personalized counseling session. During this session, recommendations involving changes in lifestyle and self-care are made, reducing the individual's risk of heart attack.

Body Composition Analysis

Queen's Body Composition Analysis includes a fast, painless and accurate computerized test which will identify:

- Recommended weight
- Pounds to lose
- Caloric requirements
- Exercise recommendations

Counseling on nutritional information and exercise guidelines will also be given.

Health-Fit

Health-Fit is a health-promoting and exercise-conditioning program. If your patients have high blood pressure, high cholesterol, diabetes, or low exercise tolerance or if they smoke or are overweight, they may benefit from this program.

Health-Fit offers:

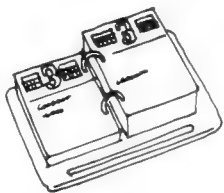
- An individualized exercise plan
- Exercise participation three times a week in our exercise facility
- Education on safe exercise practices, diet, stress management and more
- Periodic exercise progress reports that are sent to patient and physician
- Blood pressure and heart rate monitoring during exercise sessions

New Weigh

New Weigh is a program for people who want to lose weight and develop a personal exercise and fitness program.

New Weigh offers:

- Fitness testing
- Behavior changes for immediate and long-term weight control
- An individualized exercise prescription
- Exercise participation
- Individual and group weight loss counseling
- Nutrition education by a registered dietician



Continuing Medical Education

CALENDAR OF ACCREDITED EVENTS—CATEGORY 1

Accredited Programs of CME allow one unit of AMA credit for each hour of instruction excluding all "breaks." Some programs also are accredited for AAFP prescribed credit.

LOCAL ACCREDITED PROGRAMS ONGOING

For a complete list of ongoing programs, please refer to the March 1987 edition of the HAWAII MEDICAL JOURNAL. Further information is available through the individual institutions or through the HMA's CME Department.

SPECIAL EVENTS

All special events should be confirmed with the CME program sponsors, as cancellations are not necessarily reported to the HAWAII MEDICAL JOURNAL.

Dec. 20-24, 1987	Immunology, Rheumatology and Allergy, Symposium Maui Inc. and Hawaii Medical Association, Joe Harrison MD, P.O. Box 10185, Lahaina, Hawaii 96762, 808-661-8032 or 879-8182. Location: Royal Lahaina Resort, Maui.
Jan. 1-5, 1988	Specialties and Primary Practice, Symposium Maui Inc. and Hawaii Medical Association; Joe Harrison MD, P.O. Box 10185, Lahaina, HI 96761, 808-661-8032 or 879-8182. Location: Royal Lahaina Resort, Maui.
Jan. 3-7, 1988	Obstetrics, Perinatal Medicine and the Law, American Society of Law and Medicine, 765 Commonwealth Ave., Boston, Mass. 02215. Location: Hyatt Regency Maui.
Jan. 16-23, 1988	Geriatric Medicine, University of Colorado School of Medicine, Office of CME, 4200 E 9th Ave., Box C-295, Denver, Colo. 80262. Location: Kauai.
Jan. 23-30, 1988	Ninth Annual Royal Hawaiian Eye Meeting, Hawaiian Eye Foundation and Hawaii Medical Association. Contact: Mary Charles & Associates, 2334 S. King St., Suite 205, Honolulu, Hawaii 96826, 942-9655. Location: Maui.
Jan. 24-29, 1988	19th Congress of Pan-Pacific Surgical Association, Pan-Pacific Surgical Association, Box 553, Honolulu, Hawaii 96809.

Jan. 24-31, 1988 Radiology for Emergency and Primary-Care Physicians, Scripps Memorial Hospital-Encinitas, Encinitas, Calif., and The American Institute of Postgraduate Education. Contact: Edith S. Bookstein/AIPE, P.O. Box 2586, La Jolla, Calif. 92038, 619-454-3212. Location: Kona Surf Resort.

Jan. 25-29, 1988 Sixth Annual Hawaii Conference on Gastrointestinal and Hepatic Diseases, Honolulu Medical Group Research & Education Foundation and Hawaii Medical Association; Gary Globler MD, 1380 Lusitana St., Suite 701, Honolulu, Hawaii 96813, 808-536-1021. Location: The Westin Mauna Kea, Big Island.

Feb. 8-12 1988 Third Annual Cardiovascular Conference, American College of Cardiology, 9111 Old Georgetown Rd., Bethesda, Md. 20814.

Feb. 1-19, 1988 Hawaii '88: Advances in Primary Care, The Pacific Institute of Continuing Medical Education and Hawaii Medical Association; Valerie Murray, P.O. Box 1059, Koloa, Kauai, Hawaii 96756, 808-742-7471. Location: Waiohai Resort, Kauai.

Feb. 20-27, 1988 Pediatric Emergencies, Scripps Memorial Hospital-Encinitas, Encinitas, Calif. and The American Institute of Postgraduate Education; Edith S. Bookstein/AIPE, P.O. Box 2586, La Jolla, Calif. 92038, 619-454-3212. Location: The Royal Lahaina Resort, Maui.

Feb. 22-24, 1988 **Fourth Annual Mid-Winter Seminar, Hawaii Ophthalmological Society and Division of Ophthalmology, Department of Surgery; Malcolm Ing MD, 1319 Punahou St., Suite 1110, Honolulu, Hawaii 96826, 808-955-5951. Location: Hyatt Regency, Waikiki.

Feb. 22-26, 1988 Current Problems in Cardiology Diseases, William L. Nietz, Division of Education, Mayo Clinic, Rochester, Minn. 55905, 507-284-2085. Location: Maui Marriott Resort.

March 1988 World Association for Infant Psychiatry and Allied Discipline, co-sponsored with Tripler Army Medical Center, Dr. Lee 808-433-6312.

News from  about a new dosage form of cephalexin

ANNOUNCING NEW

Keflet[®]
TABLETS
cephalexin

**All the advantages of cephalexin
in a convenient tablet form**

- Backed by over 15 years of clinical experience
- Smaller tablet is specially shaped and coated for easier swallowing
- May enhance patient compliance, particularly among the elderly
- Tablet dosage form may be appreciated by patients of all ages

NEW Keflet Tablets are available as:

250-mg
Tablets



500-mg
Tablets

Keflet is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-sensitive patients.

Keflet® Tablets

cephalexin

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Keflet® Tablets (cephalexin, Dista) are indicated for the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Respiratory tract infections caused by *Streptococcus pneumoniae* and group A β -hemolytic streptococci (Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. Keflet is generally effective in the eradication of streptococci from the nasopharynx; however, substantial data establishing the efficacy of Keflet in the subsequent prevention of rheumatic fever are not available at present.)

Otitis media due to *S pneumoniae*, *Haemophilus influenzae*, staphylococci, streptococci, and *Neisseria catarrhalis*

Skin and skin structure infections caused by staphylococci and/or streptococci

Bone infections caused by staphylococci and/or *Proteus mirabilis*

Genitourinary tract infections, including acute prostatitis, caused by *Escherichia coli*, *P mirabilis*, and *Klebsiella* sp.

Note—Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.

Contraindication: Keflet is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: BEFORE CEPHALEXIN THERAPY IS INSTITUTED, CAREFUL INQUIRY SHOULD BE MADE CONCERNING PREVIOUS HYPERSENSITIVITY REACTIONS TO CEPHALOSPORINS AND PENICILLIN. CEPHALOSPORIN C DERIVATIVES SHOULD BE GIVEN CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS.

SERIOUS ACUTE HYPERSENSITIVITY REACTIONS MAY REQUIRE EPINEPHRINE AND OTHER EMERGENCY MEASURES

There is some clinical and laboratory evidence of partial cross-allergenicity of the penicillins and the cephalosporins. Patients have been reported to have had severe reactions (including anaphylaxis) to both drugs.

Any patient who has demonstrated some form of allergy, particularly to drugs, should receive antibiotics cautiously. No exception should be made with regard to Keflet.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semi-synthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C difficile*. Other causes of colitis should be ruled out.

Usage in Pregnancy—Safety of this product for use during pregnancy has not been established.

Precautions: General—Patients should be followed carefully so that any side effects or unusual manifestations of drug idiosyncrasy may be detected. If an allergic reaction to Keflet occurs, the drug should be discontinued and the patient treated with the usual agents (eg, epinephrine or other pressor amines, antihistamines, or corticosteroids).

Prolonged use of Keflet may result in the overgrowth of

nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when anti-globulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Keflet should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

Indicated surgical procedures should be performed in conjunction with antibiotic therapy.

As a result of administration of Keflet, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—The daily oral administration of cephalexin to rats in doses of 250 or 500 mg/kg prior to and during pregnancy, or to rats and mice during the period of organogenesis only, had no adverse effect on fertility, fetal viability, fetal weight, or litter size. Note that the safety of cephalexin during pregnancy in humans has not been established.

Cephalexin showed no enhanced toxicity in weanling and newborn rats as compared with adult animals. Nevertheless, because the studies in humans cannot rule out the possibility of harm, Keflet should be used during pregnancy only if clearly needed.

Nursing Mothers—The excretion of cephalexin in the milk increased up to 4 hours after a 500-mg dose; the drug reached a maximum level of 4 μ g/mL, then decreased gradually, and had disappeared 8 hours after administration. Caution should be exercised when Keflet is administered to a nursing woman.

Adverse Reactions: Gastrointestinal—Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely. The most frequent side effect has been diarrhea. It was very rarely severe enough to warrant cessation of therapy. Dyspepsia and abdominal pain have also occurred. As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

Hypersensitivity—Allergic reactions in the form of rash, urticaria, angioedema, and, rarely, erythema multiforme, Stevens-Johnson Syndrome, or toxic epidermal necrolysis have been observed. These reactions usually subsided upon discontinuation of the drug. Anaphylaxis has also been reported.

Other reactions have included genital and anal pruritus, genital moniliasis, vaginitis and vaginal discharge, dizziness, fatigue, and headache. Reversible interstitial nephritis has been reported rarely. Eosinophilia, neutropenia, thrombocytopenia, and slight elevations in SGOT and SGPT have been reported.

PV2211 DPP

[111786]

Additional information available to the profession on request from



Dista Products Company

Division of Eli Lilly and Company
Indianapolis, Indiana 46285
Mfd by Eli Lilly Industries, Inc
Carolina, Puerto Rico 00630

KX-9004-B-849327

Community Long-Term Care for Geriatric Patients in Hawaii

Kathryn L. Braun DrPH*
Joseph W. Humphry MD**
Janice M. Kaku MSW***

Three community long-term care programs in Hawaii are described and the characteristics of their patients compared to those of Oahu nursing-home patients. The results suggest that the four settings serve patients with different, albeit, overlapping, characteristics and long-term care needs. This information is of value to physicians assisting patients and families with decisions about long-term care.

Introduction

What kinds of geriatric patients are served by the growing number of community long-term care programs, compared to patients entering nursing homes? This is an important question for Hawaii physicians who assist geriatric patients and their families with long-term care decisions. This paper describes three community programs designed to substitute for nursing-home placement for a portion of Hawaii's geriatric population. The characteristics of patients entering these programs are then compared with those of patients entering Oahu nursing homes to test the extent to which these programs can substitute for nursing-home care.

Although skilled nursing facilities (SNFs) and intermediate care facilities (ICFs) are the major formal providers of long-term care services, several factors have stimulated the develop-

ment of community programs including: (1) The increasing elder population, (2) the push for more expedient discharge of patients from acute-care due to the Diagnostic Related Groups reimbursement system, (3) a desire by many elderly patients and their families to avoid nursing-home entry, and (4) economic pressures to develop less-expensive alternatives to institutionalization. Cost is an especially critical issue in Hawaii, as our nursing homes are the second most expensive in the nation.¹

The expansion of non-institutional long-term care services has been encouraged by the Health Care Financing Administration (HCFA) (which administers Medicare and Medicaid) through a program of "2176-Waivers" allowing states to use Medicaid funds to pay for home and community services for disabled people. These 2176 services must be targeted to SNF and ICF patients who would otherwise enter nursing homes at Medicaid's expense, and they must cost less than the state's average Medicaid payment for nursing-home care. Additional programs designed to prevent or delay institutionalization exist, which receive funding from other sources, both governmental and private.

Three Community Programs and Oahu Nursing Homes

This study presents information on Oahu nursing homes and on three community programs in Hawaii: (1) The Community Care Program (CCP), which provides geriatric foster care; (2) the Nursing Home Without Walls Program (NHWWP), providing comprehensive home-care services; and (3) the Maluhia Day-Hospital Program (MDHP).

Geriatric Foster Care

Geriatric foster care is provided by the CCP of The Queen's Medical Center in Honolulu. Established in 1979, this program recruits, trains and supervises foster families who "adopt" and care for one or two unrelated elderly people who would otherwise enter nursing homes.

A 2176-Waiver has allowed Medicaid payment for most foster-care services since 1984. Under this arrangement, foster families provide room and board, housekeeping and personal care — which includes assistance with activities of daily living (ADL), medications, maintenance and strengthening exercises, mobility, intermediate nursing and transportation — for which

Accepted for Publication June 1987

This study was supported by grants from the Henry J. Kaiser Family Foundation of Menlo Park, Calif., and from the Department of Health and the Department of Social Services and Housing of the State of Hawaii, Honolulu, Hawaii. Address correspondence to first author.

*Research Specialist,
Department of Social Work,
The Queen's Medical Center,
1301 Punchbowl St., Honolulu, Hawaii 96813.

**Physician consultant to the Community Long-Term Care Branch of the Hawaii Department of Social Services and Housing and to the Community Care Program of The Queen's Medical Center;
Staff physician at the Waianae Coast Comprehensive Clinic.

***Department of Social Work, The Queen's Medical Center.

they receive \$280 a month from the patient and between \$300 and \$700 a month from Medicaid, based on extent of patient's disability.

They are closely supervised by one of the program's case-management teams, each consisting of a registered nurse and master's prepared social worker. The Queen' Medical Center receives about \$380 per patient a month from Medicaid for these supervisory services, bringing the total Medicaid cost to \$680 to \$1,080 per patient a month for basic care. Patients who are not eligible for Medicaid can pay privately for foster care, from \$960 to \$1,360 per month.

Potential families are evaluated carefully. At the very least, they must have a bedroom exclusively for the patient, provide 24-hour supervision of the patient, include the patient in the family's daily routine, follow the patient's care plan, not be caring for other patients at the same time, and have another source of family income.

The majority of foster-family caregivers are Filipino and have had experience and training in caregiving either at home or in health-care facilities. From the CCP they receive an additional 12 hours of group training in geriatrics and gerontology as well as individualized training in the needs of their particular client(s) just prior to placement.

Potential patients must be interested in foster-family care (if mentally competent) or have relatives or friends interested in foster-family care; must be certified as needing intermediate nursing care; must be age 55 or older; must intend to stay with the foster family for at least six months, and be able to bear weight and assist in transfers.

The decision to place a patient in a foster home requires mutual agreement among the patient, his family, the foster family, the physician and the case management team. The foster family/patient system is monitored through regular home visits and telephone calls. This program has served 145 patients in its first seven years.²

This program was evaluated by matching 40 patients in foster care with 40 patients entering intermediate nursing-home beds and comparing them on the basis of several outcomes, after six months in their respective placements. Compared to the patients in nursing homes, the patients in foster homes showed greater improvement in mobility skills and well-being, equal improvement in ADL skills, and they expended 39% less dollars for their total health care (including physician visits, medications, hospitalizations, and ancillary services).³ Details on program processes and case reports have appeared elsewhere.^{4,5}

Comprehensive Home Care

Comprehensive home and community-based services are provided to skilled and intermediate care patients at home by the Nursing Home Without Walls/Personal Care Program (NHWWP). This program was established in 1983 and is administered by the Community Long-Term Care Branch of the Hawaii Department of Social Services and Housing under a 2176-Waiver.

The program uses case-management teams (of registered nurses, social workers, social-service aides and a physician consultant) to orchestrate the delivery of skilled nursing, respiratory therapy, home-delivered meals, respite, emergency alarm systems, home modifications, moving assistance, transportation, adult day health care and personal care (including intermediate nursing, assistance with ADL, maintenance and strengthening exercises, and homemaking by NHWWP-trained personal care aides) and other services.

This program is available to Hawaii residents of any age who are certified in need of nursing-home care, who are eligible for

Medicaid reimbursement, and who can be cared for safely at home through a case-management plan of services costing no more than 75% of the average per patient Medicaid cost of institutional care. Private-paying patients are not accommodated (however, they are referred to other agencies), nor are live-in family members as caregivers paid to provide care to their patients. In the first three years of the program, 373 patients received services with an average monthly cost of \$1,350 to Medicaid.

Patients are referred to NHWWP from a variety of sources, primarily by hospitals, home health agencies, nursing homes, physicians, other government agencies and by their families. A case-management team, specializing in admissions, assesses each referral for eligibility (level of care and Medicaid support), family-caregiver support, safety, care needs and the availability of needed services.

Once the plan of care is authorized by the physician and services are in place, the case is assigned to another case-management team that provides ongoing monitoring of patient health and well-being, supervision of personal-care aides, reassessment of patient needs, family and patient counseling and trouble-shooting. All NHWWP patients receive case-management services either in an "intensive" or in a "primary" form, the major difference being in the amount of case-management and supervision needed by the patient and his or her family caregivers.

The second most utilized service is personal care, provided by aides who have received over 200 hours of classroom and field training from NHWWP trainers. About 35% of the NHWWP clients use transportation services, 15% attend adult day health care, and 10% use program funds to modify their homes (e.g., build wheelchair ramps and widen doorways).⁶

An evaluation of the NHWWP program was conducted by comparing the three-month outcomes of 49 "matched triads" of patients in NHWWP, foster care, and nursing homes. Compared to the similarly disabled patients in the nursing homes, the patients in the two community programs showed greater improvement in several ADL and mobility skills, greater well-being, equal rates and types of morbidity and showed lower costs for routine services.⁷ Reports on care processes, patient satisfaction, and case illustrations have appeared elsewhere.^{8,9,10}

Day Hospital Care (DHC)

DHC programs have been established by several health-care facilities in Hawaii. In general, patients cared for at home can travel to these centers for rehabilitation and nursing services during weekdays. This study focused on the Maluhia Day Hospital Program (MDHP) offered by Maluhia Hospital, a state-operated, long-term care facility providing both skilled and intermediate care. A pioneer in Hawaii, Maluhia established its DHC program in 1981 with demonstration funds from the Hawaii State Legislature. Since then, the program has become a permanent part of the Maluhia operating budget. Patient expenses are paid by Medicaid for eligible patients or patients may pay privately for this care. The present cost is \$36 per day. With an average attendance of 4.3 days per week, the average monthly cost is \$650 per patient.

The MDHP provides a variety of activities and services to its participants. These include: Maintenance of mobility and strength, creative movement, nursing, personal care, nutrition, reality orientation, individual, family and group counseling, recreation, family training and education, crisis intervention and case management. The full-time staff includes registered nurses and paramedical assistants. The program shares dietary, social

(Continued on page 420)

IS YOUR FINANCIAL FUTURE A PUZZLE?

**MONY Financial Planning, Inc. Can
Help You Put The Pieces In Place!**

Our financial planning system starts with a thorough analysis of your personal financial situation. From your financial input, we produce an easy to understand, personalized financial plan. This plan is a living document, designed to be used by you and others involved in your financial affairs—your banker, accountant, attorney—to plan your financial future.

With this detailed profile in hand you will be in a position to make more informed decisions regarding steps to be taken to meet your financial goals. And you will have an experienced financial planner to advise you regarding the types of products and services which can put your money to work for you.

Where do you begin?

Our professional financial planning services begin with a completely confidential, no-obligation initial interview that allows you to determine if our services are appropriate for you. To schedule an initial interview, call MONY Financial Planning, Inc., 536-6977 and ask for Brandon Weathers, CFP.



Brandon Weathers, CFP



MONY Financial Planning, Inc.

*Registered Investment Advisor and one of
the MONY Financial Services companies.*

**Pacific Tower, Suite 2800
1001 Bishop Street
Honolulu, HI 96813**



LONG TERM CARE

(Continued from page 418)

work, physical and occupational therapy and recreation services with the Maluhia in-patients.

Patients are referred to the program by the Rehabilitation Hospital of the Pacific, acute-care hospitals, physicians, home health agencies, other community programs and by families. (A few Medicaid-eligible patients at Maluhia are referred by NHWWP from which they continue to receive case-management services).

Patients seeking admission must be certified for skilled or intermediate care and willing to participate cooperatively in exercises and activities according to a physician-prescribed plan of care. Patients and their families visit the program for an initial assessment interview and tour. The decision to enter the MDHP depends on mutual agreement by the program managers, the patient, the family and the physician. Since its inception, 140 patients have received care. Care processes, patient profiles and case illustrations are further detailed in a five-year report.¹¹

Nursing Home Care

As in most other states, Hawaii long-term care facilities play a key role in the care of frail elders. The State Department of Health certifies three types of beds: Skilled, intermediate and swing (which can accommodate either a skilled or intermediate patient, eliminating the need to transfer a patient as his care-needs change). In 1986, Hawaii had 33 nursing homes with 621 skilled beds, 959 intermediate beds and 1168 swing beds. Hawaii's ratio of beds per 1,000 people 65 and older, however, is quite low (19.3 as compared to a national average of 55.8).¹

Hawaii occupancy rates average 96%. In addition, Hawaii nursing homes have an average of 4.8 beds per licensed nurse, compared to a national average of 9.8. Hawaii nursing homes are also quite expensive as indicated by a 1982 study, which showed Hawaii's daily ICF rate of reimbursement as \$58, compared to \$36 nationally. The daily SNF rate of reimbursement of \$72 compared with \$43 nationally.¹

Ten Oahu nursing homes cared for patients involved in this research, which are: Ann Pearl ICF, Beverly Manor, Convalescent Center of Hawaii, Crawford's Convalescent Home, Hale Nani, Hale Malamalama, Hawaii Select, Leeward Nursing Home, Maluhia Hospital and Maunalani Hospital. In fiscal year 1986, monthly reimbursement rates by Medicaid to Hawaii nursing homes averaged \$2,000 for ICF patients and \$2,400 for SNF patients.⁶

Research Methods

Population

The study population consisted of 482 patients in four long-term care settings in Honolulu: 138 in foster homes, 130 in the Maluhia Day Hospital Program, 83 in their own homes with comprehensive services from NHWWP and 131 in nursing homes. The method and time periods over which the data on patients were collected differed slightly by setting, due to constraints on research funds.

Specifically, data on foster care-patients were collected longitudinally on all participants between 1979 and 1986; data on nursing-home patients were collected longitudinally on all patients discharged to ICF nursing-home beds from The Queen's Medical Center between 1982 and 1986; data on NHWWP patients were collected longitudinally on patients admitted in 1985 and half of 1986; and data on patients attending Maluhia Day Hospital Program between 1981 and 1986 were

collected retrospectively in January 1987.

Included in this research were patients 55 years of age or older and certified in need of intermediate care.

Measures

A variety of information was collected on the patients, including demographics, admitting diagnoses and admitting disabilities in ADL. The Katz Index of ADL-rated patients was used, rating patients: 1=independent, 2=needs some assistance, and 3=dependent in bathing, dressing, toileting, continence, feeding, transfers and going outside. Ambulation skill was rated on a 6-point scale from 1=independent, to 6=bed-bound.¹²

The Maluhia Day-Hospital data on ADL was not collected in this form, however. Therefore, the Katz ADL scores for the Maluhia patients were constructed through careful chart review by two trained researchers (who had collected the longitudinal data on the patients in the other three settings), with an inter-rater reliability of 0.92. Comparable data were not available on the "going outside" item so it was dropped from this analysis. Diagnoses were obtained from the patients' admission summaries.

Analysis

Patient characteristics were compared and differences were tested for significance using contingency tables. To identify which variables were associated with each of the four settings, logistic regression was used. This procedure fits a model of variables to a single binary (0 or 1) dependent variable.¹³ In this case, the four settings represented four separate binary-dependent variables; the four regression models were analyzed, first in a stepwise form and then in a full form, using SAS LOGIST.

This software also calculated a "fraction of concordant pairs" statistic by reclassifying the cases into settings using the regression algorithms, and then comparing the number of cases reclassified correctly with the number of actual cases. This provides a measure of agreement between reality and the predictions made by the logistic regression models.¹⁴

Results

As shown in Table I, the patients in the four settings differed on all of the demographic characteristics studied: Age distribution, gender, marital status, ethnicity and type of family on Oahu (immediate family versus all other). Table II shows the proportion of patients who were independent in ADL items. Among the four groups, the proportions independent in bathing, dressing, toileting, continence, transfer and ambulation varied. The four groups were similar only in the relative number able to feed themselves without assistance.

Table II also shows that the patients differed significantly across settings in the proportion of stroke, muscular/skeletal diagnoses, skin rashes and sores, pulmonary disease, cancer and dementia. The four groups did not differ, however, in the proportion of patients with heart disease, diabetes, neurological disorders, urinary/prostate disorders, and gastrointestinal disorders.

Variables upon which patients differed were analyzed further using logistic regression. The findings from the four separate analyses are summarized in Table III. These results suggest that the four settings attracted geriatric patients with different patterns of characteristics. For example, the foster-care setting attracted fewer married, fewer Japanese and more Filipino patients than did the other three settings. Foster patients appeared to be relatively more skilled in bathing and transfers, and more likely to have disabilities caused by muscular/skeletal diagnoses. Fewer foster-care patients had immediate family

TABLE 1. DEMOGRAPHIC DIFFERENCES OF GERIATRIC PATIENTS IN FOUR SETTINGS (N = 482)

	Foster Care (N = 138) n(%)	NHWWP (own home) (N = 83) n(%)	Day Hospital (N = 130) n(%)	Nursing Home (N = 131) n(%)	Significance Probability chi-square
Age:					
55-64	9(6)	10(12)	17(13)	10(8)	
65-84	103(75)	35(42)	86(66)	76(58)	
85 and older	26(19)	38(46)	27(21)	45(34)	***
Gender:					
Male	66(48)	15(18)	63(48)	50(38)	
Female	72(52)	68(82)	67(52)	81(62)	***
Marital Status:					
Single	40(29)	5(6)	2(2)	21(16)	
Married	10(7)	16(19)	61(46)	17(13)	
Widowed	54(39)	52(63)	54(42)	64(49)	
Divorced	34(25)	10(12)	13(10)	29(22)	***
Ethnicity:					
Hawaiian or Part-Hawaiian	15(11)	11(13)	14(11)	14(11)	
Caucasian	48(35)	14(17)	6(4)	52(39)	
Japanese	12(9)	36(44)	79(61)	28(21)	
Chinese	15(11)	5(6)	14(11)	14(11)	
Filipino	40(29)	11(13)	8(6)	18(14)	
Other	8(5)	6(7)	9(7)	5(4)	***
Family on Oahu:					
Immediate family	61(44)	73(88)	127(98)	97(74)	
No immediate family	77(56)	10(12)	3(2)	34(26)	***

***p < .001

TABLE 2. ADMITTING DISABILITIES AND DIAGNOSES AMONG GERIATRIC PATIENTS IN FOUR SETTINGS (N = 482)

	Foster Care (N = 138) n(%)	NHWWP (own home) (N = 83) n(%)	Day Hospital (N = 130) n(%)	Nursing Home (N = 131) n(%)	Significance Probability chi-square
Independent in:					
Bathing	9(7)	2(2)	17(13)	1(1)	***
Dressing	15(11)	4(5)	17(13)	1(1)	***
Toileting	24(17)	11(13)	36(28)	12(9)	***
Continence	43(31)	31(37)	59(45)	19(15)	***
Feeding	61(44)	32(39)	52(40)	43(33)	
Transfers	28(20)	20(24)	14(11)	12(9)	**
Ambulation ^a	49(36)	22(27)	74(57)	25(19)	***
Admitting diagnoses:					
Stroke	41(30)	28(34)	66(51)	41(31)	***
Heart disease	84(61)	56(67)	83(64)	73(56)	
Muscular/skeletal diagnosis	52(38)	43(52)	82(63)	31(24)	***
Diabetes	25(18)	25(30)	27(21)	22(17)	
Neurological diagnosis	19(14)	12(14)	26(20)	18(14)	
Urinary/prostate diagnosis	26(19)	18(22)	17(13)	30(23)	
Gastrointestinal diagnosis	23(17)	10(12)	12(9)	20(15)	
Skin rash or sore	12(9)	4(5)	13(10)	22(17)	*
Pulmonary disease	35(25)	15(18)	8(6)	34(26)	***
Cancer	16(12)	12(14)	7(5)	24(18)	**
Dementia	38(28)	19(23)	29(22)	59(45)	***

^aPatient may use device but does not need human assistance with ambulation.

*p < .05

**p < .01

***p < .001

members on Oahu.

NHWWP served relatively few males and few Caucasians, but its patients tended to have immediate family members on Oahu. These patients were relatively skilled in transfers but not in walking, and likely to be disabled by muscular/skeletal problems.

The patients in the MDHP were likely to be male, married, Japanese and have immediate family members on Oahu. They were relatively skilled in bladder/bowel control, not bed-bound but needing assistance with transfers, likely to have had strokes and unlikely to have cancer and/or pulmonary disease.

On the other hand, nursing homes served more Caucasians and more patients with dementia than did the other three settings. More of the nursing-home patients also were incontinent and needed assistance with dressing and with ambulation upon admission, and more had cancer.

The daily costs to Medicaid of the routine care provided in each of the four settings and the financial status of patients in the four settings were compared. Foster care was least expensive at \$30 per day, followed by Maluhia Day Hospital care at \$36 per day, and NHWWP at \$45 per day. Nursing home care was \$74 per day, the most expensive of the four. In addition, MDHP served the largest proportion of private-paying patients (58%), followed by foster care (25%) and nursing homes (12%). The NHWWP served no private patients, due to the structure of this program.

Discussion: Implication of findings

This paper describes three community programs designed to substitute for nursing-home care and compares the characteristics of patients in these community settings with those in Oahu nursing homes. The results indicate that disabled and diseased patients are being served in the three alternative community settings and that these programs indeed broaden the options available to geriatric patients in need of long-term care. These results also suggest, however, that all four settings served slightly different subgroups of Hawaii's patients in need of intermediate nursing-home care.

Clearly, the three community based programs serve patients who have better cognitive function, as shown by the different proportions of patients with a diagnosis of dementia (45% in nursing homes compared to average of 25% in the community settings).

This finding is in agreement with that of other researchers who have found that elders with poorer cognitive function are at higher risk for institutionalization than elders with intact mental powers.^{15,16,17} The three community settings studied here, however, are all managing to care for some geriatric patients with dementia.

Incontinence is a major problem among the chronically disabled, which may require the diapering or catheterization of a patient. In our study, a much larger proportion of patients in nursing homes had incontinence, as compared with patients in the community programs. While this suggests that incontinence may place a patient at higher risk for institutionalization, it should be noted that at least half of the patients in each setting had problems with bladder and bowel control.

Of the four settings, the day-hospital program served the largest percentage of elders independent in toileting and who were continent.

The ethnic differences among program clientele are striking. The Japanese comprise a majority of the patients in the day-hospital program and in NHWWP. The Filipino population shows a predilection for entering foster care. Caucasians make up a large proportion of the patients in nursing homes

(40%) and the foster-family program (35%). Possible explanations for the ethnic variation among the programs include: (1) Cultural factors affecting family responsibility for elder care, (2) the extent of available natural family caregivers, (3) the location of the program, especially the foster homes (predominantly in rural Oahu), (4) the orientation and marketing of the individual programs, and (5) the selection and admission criteria for the different programs.

Other demographic characteristics discriminated between patients in the four settings. Notably, of the 482 patients in this study, the less elderly married men were most likely to use the day-hospital program. Geriatric patients in NHWWP were very likely to be female. Patients in foster care were likely to be unmarried and have no immediate family on Oahu, while the patients in NHWWP and the day-hospital program were more likely to have available family help. A lack of family support has been shown to place a patient at high risk of institutionalization.^{16,18,19} Hawaii's foster-care program provides the most viable long-term care option for disabled patients without family.

While financial status was not used as one of the "predictor" variables in the regression analysis, it is obvious that service costs and a patient's financial status also influence choice of setting. For example, once acquainted with the cost of nursing-home care, non-Medicaid patients are often interested in learning about institutional alternatives. They may prefer to receive less costly care in a day-hospital program (if they have available family).

The NHWWP constraint to serve only Medicaid patients, and the financial eligibility associated with most other health and social programs in the United States, severely limit the availability and extent of home-care services for private-paying patients.

How extensively can community programs substitute for nursing-home care of frail geriatric patients? While this study suggests that the overlap in disability and disease of patients in the four settings is significant, it also identifies differences in the patient profiles of the settings. According to these data, the nursing homes serve the largest proportion of patients who are disabled in all of the ADL categories (except self-feeding) and serve the largest proportion of patients with skin problems, cancer and dementia.

Although data on behavior were not included in this study, other studies have found that the patient with aberrant behavior is more likely to be placed in a nursing home.²⁰ Thus, it is doubtful whether all frail geriatric patients can be cared for in home and community settings. For some patients, there may be no alternative other than to be placed in a nursing home.

Limitations of the Study

Practitioners of geriatrics see elders who often have multiple physical, psychological and social problems. Our research could include only a few of the many variables that may be helpful indicators of a patient's need for long-term care services. The characteristics of family caregivers are also referred to in a limited way in this research.

A patient's choice of long-term care setting can be influenced by characteristics of an extended family, in addition to the presence of an "immediate family," the only family variable included in this study. For example, how the family values caregiving, the age and health of adult children or spouse available to provide care, and the burdens experienced by family caregivers are also important determinants of patient institutionalization.^{21,22} These and other family-caregiver variables are being examined currently through research designed to test the

role of NHWWP in alleviating family-caregiver burdens.²³

Also limited is the ability of statistical analysis to provide physicians with absolute guidance about patients attracted to the settings described here. It is clear that the settings overlap in the kinds of long-term care patients they serve. Thus, the characteristics of patients attracted to the four settings, as presented here, are intended to illustrate the variety of patients and services, and should not be used to limit patient and family education about institutional alternatives.

Another constraint on this study is in its analysis of the cost-effectiveness of programs. The intention of federal funding of community alternatives to institutionalization is to reduce the overall cost of long-term care. Our study is unable to determine whether patients would have been placed in nursing homes if these community programs did not exist. Policymakers are usually afraid that expanding community programs will bring people "out of the woodwork," i.e., that these programs will create an increased demand for public-assistance by persons who would not otherwise enter institutions or seek assistance.

In addition, this study compares only the costs of routine services in each setting and does not take into account the extra costs of physician visits, medications, hospitalizations and ancillary services. Thus, this study cannot determine if institutionalization has been prevented, nor that money has actually been saved. On the other hand, the community programs are less costly to non-Medicaid patients and allow all patients to choose among several different settings when faced with a need for long-term care services.

Finally, this research has examined only four programs available to people in need of long-term care. Other programs exist that have the goals of preventing or delaying institutionalization

and/or improving the quality of life for Hawaii's elders. Many of the local medical centers, clinics and medical groups offer home care and geriatric services. Other programs are provided by local government, private and church organizations.

All of these programs have different eligibility requirements and financing arrangements. Information on services and their eligibility requirements can be obtained through the County Offices on Aging (on Oahu, 523-4545).

Summary

This article provides physicians with information on three long-term care programs designed to be alternatives to nursing home care. The findings suggest that many patients in the community programs are as disabled and ill as the elders in Oahu nursing homes. Distinct differences are apparent, however, in the characteristics of the patients served in the four settings, and also in the costs of the routine basic services provided in these settings. This information can assist physicians, who are becoming increasingly involved in long-term care decision-making, in presenting to patients and their families the options available to them.

REFERENCES

1. Institute of Medicine: *Improving the Quality of Care in Nursing Homes*. Washington, DC: National Academy Press., 1986.
2. Community Care Program: *Seventh Annual Report of the Community Care Program*. Honolulu, Hawaii: The Queen's Medical Center, 1986.
3. Braun KL, Rose CL: The Hawaii geriatric foster-care experiment: Impact evaluation and cost analysis. *Gerontologist*: 26:516-524, 1986.

(Continued on page 431)

TABLE 3. LOGISTIC REGRESSION COEFFICIENTS OF ASSOCIATION BETWEEN EACH OF THE FOUR SETTINGS AND SELECTED VARIABLES

	Foster Care	NHWWP (own home)	Day Hospital	Nursing Home
Demographics:				
Age (years)			-0.04*	
Male gender		-1.13***	0.86*	
Married	-0.91*		1.04**	
Japanese	-1.48***		0.81*	
Caucasian		-0.74*	-1.31*	0.86***
Filipino	0.81**		-1.99***	
Immediate family on Oahu	-1.57***	0.84*	3.23***	
ADL Skills:				
Bathing	-0.49*			
Dressing				0.53*
Continence			-0.88***	0.45**
Transfer	-0.65*	-0.78**	2.08***	
Walking		0.44***	-0.99***	0.25*
Diagnoses:				
Stroke			0.83***	-0.49*
Muscular/skeletal diagnosis	0.54*	0.72**		-0.77***
Pulmonary disease			-1.18***	
Cancer			-1.80**	0.93**
Dementia				0.60**
Fraction of concordant pairs ^a	0.83	0.74	0.93	0.77

^aRatio of agreement between assignment to setting based on the logistic regression algorithm and actual assignment.

*p < .05

**p < .01

***p < .001

*p < .05; **p < .01; *** < .001.

REAL ESTATE OPPORTUNITIES

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



PRESTIGIOUS PORTLOCK

Island style 5 bedroom home built around a central courtyard. Features include a separate master suite, a livingroom with vaulted ceiling and wood burning fireplace, an office/studio, and pool. Outstanding landscaping with many fruit trees. Just one lot from the ocean! Leasehold. (MLS 41482)

\$895,000

Allene Floyd (RA) 396-9600

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

WATERFRONT AT PAIKO LAGOON



Newly constructed, beautifully designed home located on Paiko Lagoon. Wonderful expansive views of lagoon and mountains. Delightful cooling tradewinds are enjoyed from every room. A subtle blend of woods, ceramic tile and soft recessed lighting creates a perfect atmosphere which is complemented by privacy and serenity of the surroundings. A sumptuous master suite is a delight to retire to at the end of the day. This home has to be experienced. Leasehold. **\$975,000**

Call Marysia Coleman (R) 735-5158

Bradley
PROPERTIES LTD.
(808) 523-0456

1177 Kapiolani Blvd., Honolulu, HI 96814

OCEANFRONT FEE SIMPLE



★ HUKILAU BEACH PICTURED ABOVE. FORMER HOME OF HOLLYWOOD STAR. COZY 2 BEDROOM, BUT UNIQUE AND VERY PRIVATE WITH WHITE SAND BEACH AT YOUR DOORSTEP. **BOB GRUNDER 953-0632 \$350,000.**

★ OCEANFRONT FEE SIMPLE AT LANIKAI ... NEED WE SAY MORE? THE BEST BUY FOR A LARGE HAWAIIANA HOME WITH POOL, SERVANTS QUARTERS AND PRIVATE TOP STORY NEW MASTER SUITE. **JERRY EDWARDS 755-1569 \$995,000**

★ OCEANFRONT FEE SIMPLE AT KOKO HEAD. THE ONLY HOME ON THE WATER NOW OFFERED. 5 OR 6 BEDROOMS, 3 CAR GARAGE, PARKING FOR 10 CARS, ORCHID GARDEN, POOL, BILLIARD ROOM. MUCH MORE. **\$2,975,000**

Scully Ryzant
LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 715, Honolulu, Hawaii 96815

KAILUA & HOLUALOA/KONA

Exceptionally Beautiful
Land with Outstanding
Development Potential

103 ACRES—This land has never been offered for sale. Some of it's special features are comfortable elevation, panoramic ocean views, desirable parcel shape, gentle terrain, abundant shade, fruit & flowering trees, dual access & proximity to Kailua Village. Offered in fee simple for \$2,700,000.

25 ACRES—Spectacular views, a gentle slope, beautiful tall trees, excellent soil, ideal climate & proximity to Kailua Village make this land very desirable. Subdivision layouts available. Very flexible terms. Fee simple. \$660,000.

To schedule a private showing or for additional information . . .

Libbie Kamisugi (R)

Libbie & Company

1060 Young St., #210 523-1381

Hono., HI 96814

REAL ESTATE OPPORTUNITIES

REAL ESTATE SERVICES

Member: The Honolulu Board of Realtors and MLS
**A TOTAL STAFF — AND REALTY SERVICE
 IN WAIANAE**



Anne White (R)



Bob Hoffman (RA)

Larry Hatfield (PB)
 Marie Hatfield (R)
 Madeline Mong (RA)
 Doris Oshiro (RA)
 Jill Johnson (RA)
 Paul Carter (RA)
 Sharon Moore (RA)

**Call:
 696-8415**

Alberta Keamo (RA)
 Arch Cook (RA)
 Valerie Cook (RA)
 Denise Martin (RA)
 C. Gay Hatfield (RA)
 Phylis Perry (RA)
 Renee Kamikawa (RA)

PROPERTY OF THE MONTH
 Waianae/Makaha Fee Simple
 Lots & Homes under \$100,000

HAWAII HATFIELD REALTY CORP.

85-833 Farrington Hwy., Waianae

SALES • VA/FHA • MANAGEMENT • NOTARY

FOR YOUR CONSIDERATION

* MANOA FEE SIMPLE LOTS *

Two adjoining lots in fine neighborhood . . . WOODLAWN TERRACE PLACE. 17,628 sq. ft. lot listed at \$250,000. 11,018 lot listed at \$200,000.

* OCEANFRONT RESIDENCE *

This eight year old immaculately maintained FEE SIMPLE country home is a perfect retreat for the weary business or professional person. Built of stucco with a Monier tile roof, its walls of glass provide tantalizing ever-changing views of the vast Pacific. The large oceanfront deck is THE SPOT for sunset viewing and those relaxing cocktail hours after a hectic day in town. \$345,000.

* CENTURY CENTER OFFICE *

Just bring your secretary and move into this lovely, highly upgraded mezzanine office which consists of a reception room, coffee bar, half bath and large executive office. The latter has two walls of marvelous floor to ceiling bookcases, one wall of custom designed storage with a built-in safe and 17 built-in lateral file drawers. \$125,000.

Call Bill or Ginger Sinsabaugh, Realtors
 for further details or appointment.



Waterfront Properties
INC.

1188 BISHOP ST., #2407

531-5311

Cellular: 226-6831

FAX 526-3496



OCEANFRONT

One of very few homes with a sandy beach. A 10 min. stroll along beach to Paiko Lagoon Bird Sanctuary. Roomy living area and open kitchen are ideal for entertaining. Large lot provides room for expansion. Gorgeous views from every room; architect's plans included.

\$1,450,000 (FS)

MLS 40064

Audrey Huter (R) 395-4246

GLORIA DAMRON ASSOC. INC.

KAHALA OFFICE
 732-1414

HAWAII KAI OFFICE
 395-7522

VACATION IN STYLE



On The GOLD COAST ... where else? Two brand new refurbished customized units designed to pamper you or your most discriminating client while on holiday. Beautiful swimming beach. First-class restaurants and close to zoo, entertainment, shops, transportation.

Call Susan L. Burgess (RA) 734-4242

HILL & CO.

specialists in fine residential properties

HONOLULU

373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821

Cost-Effectiveness in a Frail and Elderly Population

Harry Lee MD

About our author . . .

The following article was submitted by a former member of The Queen's Medical Center House Staff (1950-1951), a trainee who has since settled in San Francisco's Chinatown to practice medicine.

The alumni and alumnae of Queen's have been holding annual get-togethers, usually at the Turtle Bay Hilton near Kahuku on the North Shore of Oahu. Not only is it a fun and social gathering for renewal of friendships; it is also associated with a program of continuing medical education — the sharing of new knowledge, new ideas, and new approaches to the care of our patients.

We welcome Dr. Harry Lee's contribution.

As you can see, I am now ensconced in San Francisco, having left Paradise, where I trained. In this city by the Bay, you can see the cable cars running up Hyde St., with Alcatraz in the background, and down into Chinatown. It is here, in the Chinatown-North Beach district, that a group of individuals recognized the need to serve the frail elderly. In 1972, On Lok Senior Health Services — formed as a nonprofit, free-standing, community-based organization — opened the first licensed day health-care center in the state of California. From 1978 to 1983, On Lok covered all expenses of health care in a special research and demonstration project funded by the Administration on Aging and the Health Care Financing Administration. Under this program, the frail population, as certified eligible by the state of California for 24-hour institutional care, is provided all the health care and health-related services that they may need.

On Lok's model has shown that this single-provider program is cost-effective and has great acceptability from the patients' perspective. All medical, therapeutic, and social services, inpatient acute and chronic care, as well as outpatient care, are integrated into a single health program coordinated by a multidisciplinary team.

Being a consolidated provider of services, with financial responsibility for such services and control over the delivery of

care, On Lok has the implicit incentive to control long-term care costs. In addition to the services provided, On Lok also operates a housing unit, supported by Housing and Urban Development, known as On Lok House. This total On Lok program, known as the Community Care Organization for Dependent Adults (CCODA), therefore, has control, not only of total medical and social services, but also of the housing component of many of its participants. The On Lok House has 54 studio apartments accommodating one or two persons each.

In November 1983, a new demonstration project was begun in which this organization assumed total financial risk, accepting a monthly capitation rate as payment in full for all services. This new demonstration project will assess the feasibility and desirability of provider assumption of risk as a means of improving the quality and controlling the cost of long-term care. Necessary services waivers from Medicare and Medicaid were obtained. Research and development funding is from a consortium of foundations: Robert Wood Johnson, Hartford, Kaiser Family, and Retirement Research.

The new project is unique in that On Lok is the only organization in the country to assume total financial risk under a fixed capitation rate for an all-inclusive range of services provided to an institutionally certified elderly population. The capitation rate is \$1,476 per month, per participant. This is divided between Medicare (\$650) and Medicaid (\$826).

As a result of the four years of the earlier demonstration program — a consolidated model of health-care delivery, it became clear to us that such a model was feasible, acceptable, and cost-competitive. As stated, all On Lok participants are eligible for institutional care at the time of entry, and 96% have been able to continue to live in the community. This group of approximately 300, as compared to a similar group of individuals utilizing services in the traditional system, showed more improvement in functional independence and expressed greater satisfaction with services received.

The data are still approximately correct as to the personal characteristics of the participants. The mean age is close to 80; females predominate by 55% over males (45%); 13% are single, 25% are still married, and 54% are widowed. The others are either divorced or separated. Twenty-nine percent of these participants do not have children, although it is interesting to note that 21% have four or more.

The ethnicity of our population is 75% Chinese, 13% Caucasian, and a smaller percentage of others. Chinese is the primary language spoken by 74%, with 39% having no English fluency. Their usual living situation is alone in 58% of the cases, 17% with a spouse only, 15% with other relatives, and 3% in a

Accepted for Publication July 1987

Presented at The Queen's Medical Center House Staff Reunion Saturday, April 20, 1985.

skilled nursing home.

Their financial characteristics are 9% having a monthly income of \$100 or less, with 42% showing income of \$400-\$500. Most of the source of income is from Social Security (69%). Fifty-eight percent of our population has Medicare and Medicaid coverage, with 19% Medicare only, 13% Medicaid only, and 9% qualifying as Medicare Medically Needy Only (MNO).

The primary diseases are as would be expected and are concerned with the nervous system, stroke being the major disorder; cardiovascular disease is second, mental disorders are third, and musculoskeletal deformities are fourth.

The cohorts' functional skills reveal a high impairment of cognition in terms of long- and short-term memory deficits at 65% and 74%, respectively, poor reasoning 57%, and sensory impairments, mainly visual and hearing, of 56% and 43%. In terms of the activities of daily living, there are problems with dressing (42%), grooming (50%), bathing (65%), and toileting (32%) of the participant population. The toileting reflects those who may be incontinent of urine, stool, or both.

Of the total services provided, most are given at our day-health-care centers. Other services are provided at two acute-care hospitals, at two skilled nursing facilities, at in-home, and by individually contracted services such as dentistry, optometry, pharmacy, podiatry, audiology, psychiatry, and other specialized medical services.

The intake and assessment team (I&A Team) meets once each week, at which time it develops the total health-care plan and package for our participants on a quarterly basis. The I&A Team is composed of the physician, dietician, nursing, social worker, those involved with transportation, and other support services. Our transportation service has five vans and two other passenger vehicles. We transport participants from the skilled nursing facilities, from our supervised housing units, or from their homes, to the day-health-care centers.

As of April 1, 1985, we had 10 participants in a nursing home and 33 living in six flats that our organization rents. Each flat has one health worker who monitors five to six individuals during the night. During the day these individuals are transported to our day-health-centers. We have 99 living in the On Lok House. The rest are either living at home, alone, or with others. Our in-hospital population generally runs between two to three individuals per day. Each day-health-care center is able to accommodate approximately 70 to 75 individuals. Two day-health-centers operate Monday through Friday, and the third operates seven days a week. On Saturdays and Sundays, that day-health-care center population soars to approximately 85 to 90 individuals.

It involves a great deal of effort to transport these individuals to and from our three day-health-care centers, located in the North Beach-Polk Gulch area of San Francisco. For those who are more familiar with the city, we have two day-health-care centers in the Chinatown area — one on Powell St. and another on Broadway. The third one is located in the Polk Gulch area, on Bush St.

Our health-care workers also escort a few of our participants who live nearby. At present, On Lok has one nurse practitioner; we will soon have three. Our nursing service and dental service are, as one might imagine, quite active. Dental care is not restricted by Medicaid regulations, and the I&A Team decides upon the extent of such things as dental prostheses.

Occupational and physical therapy services are very active and extensive in the day-health-care center. Home-care, involved in keeping individuals clean, occupies much time and effort since, as I mentioned, 32% of our participants are incontinent of urine or stool. Many of them have scheduled bathing routines and

their clothes are washed for them at the day-health-care centers. Our nutritionist gives frequent instructions to the participants. Recreational therapy plays a significant role as well. Occasionally we need to send one of our home-care staff to supervise such home chores as cleaning up the accumulated debris of our participants.

Our expenses per capita from July 1, 1984, to Dec. 31, 1984, for approximately 300 participants (1,806 capitation months), amounted to a total of \$2.83 million, or a cost per capitation month of \$1,568. This compared with a payment rate by Medicaid of \$1,476 per participant per month. The difference was a loss of \$92, but this and more was paid by the participant out of private income and from other sources. The net result has been that we have broken even every year and have even gotten a little ahead. Once again, considering that these costs include everything so far enumerated, cost-control is effective, and beneficial as well.

For a breakdown of our personnel for our 300 patients, we have 160.8 full-time equivalent (FTE) workers. There are 2.25 physicians, one nurse practitioner, eight registered nurses, eight social workers, and a large number of in-home support personnel. These are needed, not only in our supervised housing flats, but they are sent to the homes of individuals and also work at On Lok House.

To look at the cost from a different perspective, our cost breakdown from July 1, 1984, to Dec. 31, 1984, is as follows. The day-health-care centers take 24.1%. Home and support services are quite expensive, at 13.5% of total cost. Administration is at 8.4% of cost. The rest are between 5% and 6%. We set aside 10.4% for risk reserve, in case of major medical disasters. The funds are used to buy re-insurance.

Of interest is the pharmacy cost per participant. The drugs are on a unit packaging system which the pharmacy serves to approximately 90 participants, at 262 prescriptions each week. The average cost per participant for December 1984 was \$39.14, and the median is approximately \$20 per month.

I think it is clear that the consolidated model offers cost-effectiveness in the administration of care by reducing duplications that brokerage models, or other types of models of health-care delivery, have. In addition, at this preliminary junction, we believe that our health-care delivery system can effect a significant reduction in cost by reducing acute-care admissions and lengths of stay, and by reducing admissions to nursing homes.

Here is a primary study by one of my colleagues at On Lok, Dr. Catherine Eng. Eng compared two periods, citing a prior period in which the focus of attention was not made concerning dispositions but was performed in a traditional way, with 173 discharges from two acute-care institutions; 54% were returned home and 23% were discharged to nursing homes. For the period of our study, the percentage returning to private homes remained about the same, 51%, but the percentage going to nursing homes was significantly reduced to 6%. Those going to supervised housing and respite care show a significant increase in numbers, 14% and 15% respectively.

In these preliminary studies, the acute-care utilization during the period from February 1980 through May 1981, and beginning August 1981 and continuing to the present, the number of hospitalizations per 1,000 patients dropped from 577 to 325. The total number of study days for both periods was approximately equivalent at 113,000. The average length of stay has shown a drop from 10.8 to 8.6 days. Our experience may have been due, in part, to the influence of PSRO and PRO review activities at the acute-care institutions and, particularly recently, under DRGs. However, I must say that our contract with the

acute-care institutions exempts On Lok from any penalty considerations on the basis of lengths of stay in-hospital. The reduction in skilled nursing utilization, or the number of transfers to nursing homes per 1,000 patients, went from 246 to 29 per month.

By close monitoring of the participants by our primary-care physicians, both certified internists acting as gatekeepers, we are beginning to develop some preliminary data to show that such activities do reduce the hospitalization rates. The use of our supervised housing units, and of our respite unit, does indeed reduce the cost of care without sacrificing quality of care. For instance, during the past year we had 18 fractured-hip cases; we have taken the patients directly from the hospital at the time of discharge and, rather than sending them to a rehabilitation center or a skilled nursing facility, we have brought them to our respite unit where they are given their physiotherapy and occupational therapy on a daily basis. To date, the results have

been quite gratifying.

We believe that quality of care has been maintained throughout. We are also studying the effects of monetary constraints and the ethical issues concerning our total health-care plan, as given to our participants. On Lok has a separately funded research unit that compiles the data base, and whose areas of research are not only on issues that may have national policy implications, but program issues as well. Our physicians are cognizant of the high cost of care, and it is, I believe, the total commitment of our personnel that contributes to the reductions in acute exacerbations of chronic diseases, with their subsequent acute hospitalizations, and that has kept our program cost-effective. Our objectives will continue to be to help the individual patients to remain in our community and to keep them out of institutions as long as possible. We hope to demonstrate the continued feasibility of provider assumption-of-risk for this frail population by improving quality of care yet controlling the cost of long-term care.

. . . a multiplicity of services

An Alternative Approach to Care for the Frail, Vulnerable Elderly in Hawaii

Laura Jean C. Armstrong RN, BSN, MPH, CNA*
Constance M.L. Chock RN, C, BSN, GNP**

The Case Management Coordination Program (CMCP) under the Public Health Nursing Branch of the Hawaii State Department of Health, initiated as a model in 1982, is an alternative approach to the delivery of services to the frail elderly with long-term care needs. Its major focus is to prevent unnecessary institutionalization and fragmentation of services by means of a continuum-of-care, to ensure that the elderly could maximize their level of independence, minimize their disabilities, and live up to a defined optimum quality of life in dignity and respect.

Introduction

The Public Health Nursing Branch of the Hawaii State Health Department is a service agency working collaboratively with other programs within the Department of Health as well as with numerous public, private, social, and other health-care pro-

viders in Hawaii. The public health nurses (PHNs) provide comprehensive nursing care to approximately 80,000 individuals annually on a statewide basis. These professional services are goal-directed and centered on family and community.

Significant changes in the composition of Hawaii's population were identified in the early 1980s, especially the rapid increase of the older persons. This dramatic demographic shift toward an elderly population and the rise in longevity rates posed a growing need for long-term care, whether it was institutional care or community-based. The State Department of Planning and Economic Development projects that, in 1990, 168,900 individuals will be 60 years and older. This group is known to utilize health-care services more than any other age group.¹ It has been generally demonstrated that "community care" is less costly than institutional care, except when there are severe disabilities or when the elderly have little or no support persons assigned as caregivers.² The increasing cost of long-term care and the trend of people to opt for home care were important considerations in the development of alternative care and case-management services.

The inception of the Case Management Coordination Programs (CMCP) within the Public Health Nursing Branch took place in early 1982 through an initial contract agreement be-

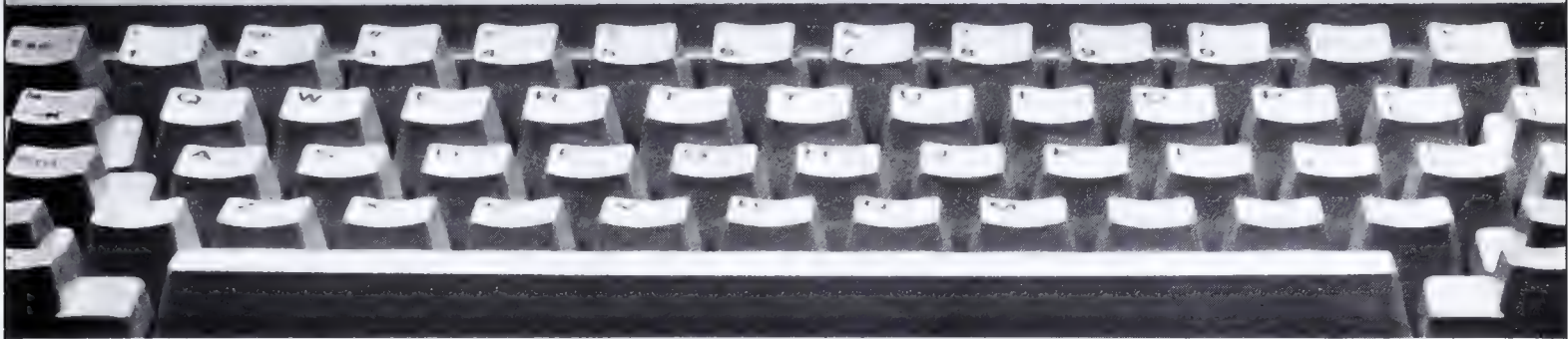
(Continued on page 430)

Accepted for Publication

*Assistant Chief,
Public Health Nursing Branch
Department of Health, State of Hawaii

**Geriatric Nurse Practitioner,
Public Health Nursing Branch
Department of Health, State of Hawaii

Let us put in a good word for you.



GECC Hawaii Leasing is the best source for financing word processors or computers in Hawaii.

We can tailor a lease for you that'll fit your financial need as well as your new computer fits your data processing requirements.

We're flexible, with the ability to structure leases for the specific requirements of our customers including length of lease, payment terms and tax considerations.

We're a part of the \$26 billion General Electric Credit Corporation, bringing good things to life for Hawaii's businesses.

Talk to GECC Hawaii Leasing about leasing a computer, word processor or other equipment for your business.

The new tax law changes alter some of the benefits of leasing. So call now. And let us put in a good word for you at the office.

700 Bishop Street, 9th Floor
Honolulu, HI 96813 Ph. 527-8333

GECC HAWAII LEASING

a division of:



**GECC
Financial
CORPORATION**

*First and Second Mortgage Financing for Commercial and Residential Real Estate • Credit Lines for Individuals and Businesses
• Equipment and Vehicle Leasing • Inventory and Receivable Financing • Thrift Investment Programs*

Member FDIC



ALTERNATIVE APPROACH

(Continued from page 428)

tween the County of Hawaii Office on Aging (HCOA) and Public Health Nursing. The HCOA recognized that long-term care, case-management services focusing on its frail and vulnerable elderly population was a priority for the County. A unique case-management model was set up, which focused on an approach to a developmental, interdisciplinary, case-management system to be coordinated by public health professional nurses. The Hawaii Case Management Coordination Program met with almost immediate success as agencies joined together to address difficult cases that had previously thwarted them as individual providers. The team case-management model was then utilized for the development of the Maui, Kauai, and Oahu programs during the latter part of 1984 and 1985.

Case Management Coordination Program: Goals, Uniqueness and Definitions

The long-term care of elderly patients, for the most part, suffer from multiple chronic illnesses that limit their functional abilities. The case-management program is an alternative approach in the delivery of services to these frail elderly with long-term care needs who choose to live in a less restrictive environment, whether this be in the patient's home or in a group-type home. Problems or barriers that were initially perceived in the provision of long-term care services included fragmentation and duplication of services and programs, administration of programs working at cross-purposes with each other, absence of comprehensive service arrangement and delivery, as well as the fact that the multiplicity of needs of the elder person could only be addressed by a coordinated service approach.³ Therefore, the goals of the CMCP are to prevent unnecessary institutionalization and fragmentation of services by means of a continuum-of-care model to ensure accessibility and availability of a system of long-term monitoring for the purpose of maximizing the level of independence and minimizing the disabilities of the elderly.

These goals are being realized through the utilization of two types of interdisciplinary teams that make this model unique.

The first team to be established was the mid-management planning team comprised of administrators or administrative representatives of a number of agencies already steadily involved in the care of the aged. This team provides the general planning and advisory responsibilities, and meets regularly to review the program's progress and to act as an ongoing evaluation body.

The second team is made up of the actual service providers of these various agencies. Members of the teams can include social workers, legal aide representatives, nurses from other public and private agencies, ministers, caregivers, outreach workers, professionals from the long-term care facilities or home health agencies, adult day care representatives, policemen, and other individuals in the community.

This team is coordinated by the public health nurse. Individual cases are discussed by the team in a comprehensive, holistic way. Consensus among the team members results in the development of a collaborative care-plan, with follow-up case discussions as a regularly scheduled agenda item at subsequent meetings. In addition to the care-team members, outside persons are invited to participate and share their expertise at these interdisciplinary team meetings. Within the teams, agency members find support and current and additional information about each others' resources as well as about the patient. More efficient interagency communication ensues.

The program focus is centered on the elderly patient and his or her family caregiver. The services are comprehensive and are

geared to provide comfort and to improve, maintain, and/or restore the health status of the elder. In addition, the needs of the caregiver, frequently overlooked, are a primary consideration in case management.

Case management under the Public Health Nursing Program means a comprehensive, holistic approach to the planning and delivery of services to meet the needs of the patient and/or his or her family. These services incorporate the nursing process of case finding, assessment, and identification of needs. Plans are then developed to provide the necessary services, referrals and networking, monitoring, documentation, and case coordination.

This process includes the patient and family, the caregiver, the physician, other health or social agencies, and the PHN. The CMCP views each patient in a *holistic* manner, recognizing that each elder is an individual person with family and friends, living in a specific community. He or she identifies health needs and concerns based on beliefs and values, personal lifestyle, and social milieu.

The physician who views the patient as a whole person continuously weighs the value of home care against the risk of placement in an institution, based on outcome.³ For example, a physician may need to assist the family in deciding whether a confused patient should be kept at home but at the same time risk a chance of injury, as opposed to being placed in an institution that provides 24-hour supervision but detracts from the patient's "quality of life."

The choice between remaining at home or being placed in an institution is a difficult one. The CMCP can assist the physician, patient, and family by assessing and identifying the risk factors specific to each situation, identifying and coordinating available resources, and closely supporting and monitoring the family's progress toward making the decision.

The persons who are provided case-management coordination services must be 60 years or older, have either moderate functional problems with activities of daily living (ADL), or have severe functional difficulties with "instrumental" activities of daily living (IADL). They may also have disabilities associated with cognitive and emotional problems, or a combination of ADL and functional disabilities.

Case Management An Intrinsic Part of Public Health Nursing

The role of case manager and coordinator is not new to the PHN. It is an integral part of nursing management in which assessment, care planning, acquisition of and/or referral for appropriate services, coordination of services, and ongoing monitoring and reassessment are provided to the persons needing continuous nursing care. The PHN as a case manager not only serves as a "brokerage" person providing linkages to entitlements, since many such programs have economic constraints that limit the range and intensity of services, but she also counsels and teaches home care, providing hands-on demonstrations of nursing care to both the patient and the caregiver.

The PHN sees to the continuum of care when transfer from the home, to and from the hospital, or to long-term care facilities becomes necessary. The system of care is open-ended and decisions are made jointly by the patient, the family, the primary-care physician, and others involved with caregiving. Options are proposed and choices are made based on the available information and resources that are appropriate.

Advantages of Case Management Coordination Program

The CMCP has identified the following advantages for the elderly patient and family/caregiver as well as for the physi-

cian. These advantages for the patient and the family/caregivers are that:

- It provides the patient and family/caregivers an opportunity to be very involved in the care planning.
- It allows the patient and family/caregivers to be part of the care team and the decision-making process.
- It provides the patient with individualized and personalized care based on his or her needs, environment, and social milieu as well as available community resources.
- It gives the patients the dignity to which they are entitled in order to retain their identities and sense of worth.
- It assists the person to maintain his or her own preferences as to food and lifestyle.
- It provides the patient with non-obstrusive services.
- It allows the elderly to obtain the most individualized and cost-beneficial services from the multiple-service provider team.
- It provides a team of advocates on behalf of the person and family/caregivers.
- It allows for scheduled follow-up and monitoring of the person's needs, according to an individualized care plan.

The advantages that CMCP has to offer the physician caring for the elder patient are:

- It provides the physician with a comprehensive, ongoing view of the patient and family.
- It provides for continuity of care.
- It assists the physician by making periodic functional assessments of the patient and monitoring and evaluating his or her health status.
- It provides the physician with case-manager/gatekeeper services within the aging network system.
- It helps the physician assess the client's right to entitlement programs.
- It assists the physician by evaluating the environment, the climate of care, and the support resources available.

Summary

In Hawaii, there are three major case-management programs for the elderly under the administration of the State government: Two are administered by the Department of Human Services, and the third is the Case Management Coordination

Program under the Department of Health. These programs have been developed independently; each utilizes its own specific model to provide services to the elderly population and to provide long-term care.

All case-management programs have emerged as approaches to coordinate the long-term, care-service continuum and to monitor the changing health needs and the delivery of care to the elderly. This year, the County of Hawaii CMCP model was nominated for national recognition by the Executive Office of Aging, for "A Community Achievement Award for Model Community Based Systems Development." This is quite a kudo for Hawaii.

Ethical and legal issues abound in the decision-making processes involved in the care of the impaired elderly, be it in healing or when there is little or no potential for healing. These issues span the medical, nursing, social, legal, and ethical areas of expertise. The focus should be on the elder's perception of "the quality of life." When this is not possible, the quality of life can only be surmised by those who have empathy and can determine what the individual would choose for him or herself.

The Case Management Coordination Program, under the Public Health Nursing Branch of the Department of Health, provides the elderly the opportunity to maximize their potential in self-care capabilities and assists them to remain at home or in a minimally restrictive environment. This approach thereby enables the functionally disabled 60-year-old and older individual to have some control over their diminishing life options.

REFERENCES

1. Future Projections of Supply and Demand: Department of Planning and Economic Development, 1985.
2. Grace L: Case Management and the Nurse, *Geriatric Nursing*, Nov/Dec 1984.
3. Spiegel AD: Home Health Care: Home Birthing to Hospice Care, National Health Publishing, Md., 1983.
4. Goldstein MS, Jaffe DT, Sutherland C: Physicians at a Holistic Medical Conference: Who and Why?, *Health Values*: 10:5, 1986.
5. A Challenge for Change: The Role of Gerontological Nursing, ANA Division on Gerontological Nursing Practice, 1982.
6. Robinson BE, Lund CA, Keller D, Cuerva C: A Validation of the Functional Assessment Inventory Against A Multidisciplinary Home Care Team. *Journ Am Geria Soc* 34:12, Dec 1986.
7. Braun KL, Vandivort RE, Kurren GM: Foster care is a workable option in Hawaii. *Perspectives on Aging*: 9(1):18-20, 25, 1985.
8. Vandivort RE, Kurren GM, Braun KL: Foster-family care for frail elderly: A cost-effective quality-care alternative. *J Gerontological Social Work*: 7:101-104, 1984.
9. Community Long Term Care Branch: *Fourth Annual Report on the Nursing Home Without Walls Demonstration Project*. Honolulu, Hawaii: Department of Social Services and Housing, 1987.
10. Braun KL, Rose CL: Geriatric patient outcomes and costs in three settings: Nursing home, foster family, and own home. *J Am Geriatrics Soc*: 35:387-397, 1987.
11. Goto LS, Braun KL: Nursing Home Without Walls: An alternative to nursing home placement. *J Gerontological Nursing*: 13(1): 7-9, 1987.
12. Goto LS, Braun KL: Hawaii's Nursing Home Without Walls: An option for "continuity of care" planners. *Coordinator*: 5(4): 14-16, 1986.
13. Braun KL, Goto LS, Lenzer AM: Patient age and satisfaction with home care. *Home Health Care Services Quarterly*, in press, 1987.
14. Maluhia Hospital: *The Maluhia Day Hospital Program: A five-year report*. Honolulu, Hawaii: Department of Health, 1987.
15. Katz S, Ford AB, Downs TD et al: *Effects of Continued Care: A Study of Chronic Illness in the Home*. DHEW Publication 73-3010, Washington, DC: Government Printing Office. 1972.
16. Walker SH, Duncan DB: Estimation of the probability of an event as a function of several independent variables. *Biometrika*: 54:167-179, 1967.
17. Harrell FE: The LOGIST procedure, in *SUGI Supplemental Library Users Guide*. Cary NC: SAS Institute Inc., 1983.
18. Smyer MA: The differential usage of services by impaired elderly. *J Gerontology*: 35:249-255, 1980.
19. Sloane PD: Nursing home candidates: Hospital inpatient trial to identify those appropriately assignable to less intensive care. *J Am Geriatrics Soc*: 28:511-514, 1980.
20. Branch LG, Jette AM: A prospective study of long-term care institutionalization among the aged. *Am J Public Health*: 72:1373-1379, 1982.
21. Palmore EB: Total chance of institutionalization among the aged. *Gerontologist*: 19:427-431, 1979.
22. Barney JL: The prerogative of choice in long-term care. *Gerontologist*: 17:309-314, 1977.
23. Smallegan M: There was nothing else to do: Needs for caring before nursing-home admission. *Gerontologist*: 25:364-369, 1985.
24. Deimling GT, Poulshock SW: The transition from family in-home care to institutional care. *Research on Aging*, 7, 563-576, 1985.
25. Zarit S, Reeve K, Bach-Peterson J: Relatives of the impaired elderly: Correlates of feelings of burden. *The Gerontologist*, 20, 649-655, 1980.
26. Kaku J: Role of NHWWP/PCP in alleviating family-caregiver burden: Results of the BASICS pretest. Unpublished report, The Queen's Medical Center, 1986.

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo) 329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**

Nursing Home Populations, Then and Now

Abe Sakai MPH*

Feelings about nursing homes vary depending on whom you talk to. The spectrum of opinions ranges from the dislike for all nursing homes, with the suspicion that "quality is not sufficient," to "the quality is excellent in Hawaii," and "I would not hesitate to place a family member in a nursing home if necessary."

A brief comparison of where Hawaii stands with respect to nursing homes in relationship to other states is of interest.

- In 1983, of all the 50 states, there were 46 with more nursing-home beds than Hawaii for the over-age 65 population.¹
- In 1981, 48 states had a lower ratio of licensed nurses per patient in nursing homes than Hawaii.
- In 1981 Hawaii ranked second-highest for reimbursement for an average nursing-home bed.³
- Among the facilities in the United States cited for a key deficiency in 1983, Hawaii was the fourth-lowest.⁴

It has been suggested that one out of four people over the age of 65 will someday need nursing home placement. One author states "While 29% of the long-term care (elderly) population resides in an institutional setting, (e.g. nursing homes), 71% are living out in the community."

Residents (nursing home patients) are generally more disabled than those in the community.⁵ Statistics indicate that a person over 65 has a good chance of needing nursing home care at some point in his or her life.

In 1986, according to the Health Services and Facilities Plan for the State of Hawaii, there were 2,769 nursing home beds available in the State. If all of the beds that have approved certificates of need were on line, there would be a total of 3,383 beds available for use. With an estimated 19% increase in the over-65 population in Hawaii between 1985 and 1990, the need for an increasing number of beds will continue.

What type of patient is in nursing homes now? As stated by Doty,⁶ residents in nursing homes are generally more disabled than those living in the community. This statement is consistent with a study accomplished by Colin Hayashida, MD of the Kuakini Geriatric and Family Services Program. In his study, residents of intermediate care facilities were more functionally disabled than those persons in need of adult day health, or adult day care.⁷

In a study done at the Convalescent Center of Honolulu (CCH), the functional disabilities among the Intermediate Care Facility (ICF) residents were similar to the study completed by Hayashida.

Our study measured the average in 11 areas. Those areas are as follows:

- 1—Eating
- 2—Dressing and Grooming
- 3—Toileting
- 4—Bathing
- 5—Transfers
- 6—Functional Mobility
- 7—Communication
- 8—Mental Condition (this has to do with orientation)
- 9—Behavior
- 10—Psycho-Social
- 11—Medications

On a scale of 1 to 6 with 6 being the most incapacitated and 1 being the least, the average ICF patient totaled 36 points, whereas the skilled-nursing facility (SNF) patient averaged a total of 50 points.⁸ One could, therefore, conclude by this study that the SNF patient is more dependent and functionally disabled than the ICF patient.

To summarize the type of patients that are presently in nursing homes, all three studies mentioned above indicate that the nursing-home patients are more functionally disabled than the non-institutionalized individuals. The CCH study is in agreement with Hayashida's as far as the level of dysfunction is concerned.

The periodical, *Nursing Homes and Senior Citizens Care*, spoke of patients being discharged from hospitals faster and sicker than previously.⁹ Others in the community speak of the same issue.

In a study done at the CCH comparing the degree of acuity in August 1987 with that in September 1984, this was not validated. In each of the 11 areas of care mentioned above there were no significant differences. The functional disability, medications, behavior, psycho-social and mental condition were much the same. So far, this author knows of no other objective study that has measured the acuity of patient states over the last three years, nor a study that shows that patients are being discharged from hospitals to nursing homes "sicker and quicker."⁹ The treatments requiring a licensed nurse have not changed either. It needs to be noted, however, that an area of care that has seen an increase in the acuity level of patients is in home care.

Two administrators of home health agencies have spoken of

Accepted for Publication September 1987

*Administrator,
Convalescent Center of Honolulu

an increase in the amount of care that they are required to give. Some patients now in the home setting are ventilator-dependent, on total parenteral nutrition, or getting IV medications. One only has to compare the number of home health agencies now to the number that existed five or six years ago to see that the growth has been in this area.

Nursing homes should not admit a patient who requires more care than they are capable of giving. In some cases the patients who are discharged home have good family support, and with the assistance of skilled nursing care from the home health agency they receive the required care. Nursing homes do not generally admit patients requiring ventilator support, nor the patient on total parenteral nutrition (because of the extra nursing care that is involved and the level of reimbursement offered). Intermediate care facilities are not licensed for this type of care. Recently, one facility negotiated a contract for a pilot project with DHS to care for ventilator-dependent patients; this is the first such nursing home that has ventured into this area.

California has filed regulations that create a new level of skilled care for patients who do not require acute hospitalization.¹⁰ Specifications for staffing are closely defined. Reimbursement for this type of patient is higher than that to the regular skilled-nursing facility, so that additional personnel can be hired. In a survey done Sept. 11, 1987, there were 73 patients in acute-care hospitals on Oahu awaiting placement in a nursing home. Whether these patients were of the "sub-acute" type cannot be said, however some patients have been on waiting lists longer than others due to the level of care that they require.

It appears that there is a need for nursing homes in caring for the sub-acute type patient. If this could be arranged it would be a cost-saving for the State, since that patient is currently occupying a hospital bed.

In summary, it can be said that nursing-home patients are more functionally disabled than those cared for out in the community. It would be logical to assume that for the patients requiring nursing-home placement, it is a matter of functional loss as well as of a particular diagnosis. The average length of stay in a post-acute care facility has been said to be approx-

imately 30 months. In one study, the average length of stay in a SNF/ICF was 28 months.¹¹

Hayashida's study indicated that the average nursing-home patient had fewer problems than did the clients in a day health program or adult day care. One might conclude that lack of support in the home is a factor in institutionalization.

The saying that the patient is being discharged "sicker than quicker" does not apply to a nursing home here in Hawaii that compared the acuity level of its patients to what it was three years ago. It would appear that there is another level of care needed that is not yet recognized; that is the sub-acute level.

California has recently recognized this level. In any event, with the growth in our aging population there will be a continuing need for nursing-home beds due to the increased functional loss and the aging process among those over the age of 65, as well as for the younger person who is disabled either through disease or injury.

REFERENCES

1. Aging Health Policy Center, University of California
2. Medicare and Medicaid Automated Certification System, 1981 Health Care Finance Administration
3. Analysis of Medicaid Characteristics, La Jolla, Calif., 1983
4. Medicare and Medicaid Automated Certification System, 1981 Health Care Finance Administration
5. Special Report, Doty, Pamela, et al, Health Care Finance Administration, Review, Spring 1985, Vol 6 #3.
6. Special Report, Doty, Pamela, et al, Health Care Finance Administration, Review, Spring 1985. Vol 6 #3.
7. Statewide Adult Day Center Study Kuakini Geriatric & Family Service Program, Colin Hayashida, 1987.
8. Convalescent Center of Honolulu, Comparison of Patient Acuity Level, Sept 1987.
9. Nursing Homes and Senior Citizens Care, Jan/Feb 1987, p 92.
10. Department of Health Services, Memorandum, June 30, 1986, Sacramento, Calif.
11. Convalescent Center of Honolulu, Comparison of Patient Acuity Level, Sept 1987.

. . . government of and for the people

Catastrophic Health Insurance

Gladys C. Fryer MD

On April 16, 1987, Congresswoman Pat Saiki presented a three-hour workshop on "Catastrophic Health Insurance," jointly sponsored by the Hawaii Medical Association and chaired by William Hindle MD.

Keynote speaker was Thomas R. Burke, chief of staff of the Department of Health and Human Services and author of the White House bill on the subject, who said consideration was given to three areas of need:

1—Acute Care Catastrophic Protection for the Medicare-age group.

Of the three areas, this was the only one thought to be feasible to assist by enactment now. It was proposed that for an extra \$6 per month on each participant's current \$17 Part-B premium payment, Medicare beneficiaries would be covered for all costs of acute catastrophic illness beyond the first \$2,000. This increase in payment would be enough to make the arrangement self-supporting.

2—Catastrophic Care for those under 65.

Catastrophic care for the under-65 could be aided by such

means as risk pools for the uninsurable, or Medicaid buy-in for people who could not afford Medicare insurance.

3—Long-term care for those over 65.

Based on statistics, the number of elderly was projected to rise by 13% by the year 2000 — to 35 million for those over 65, and to 5 million for the over-85s. Health expenditure in 1985 was 10.7% of the gross national product (GNP).

At present, 75% of the elderly are being cared for at home, and it was proposed that this percentage be maintained. There was a fear that a generous, long-term care coverage would produce what in Washington is called “woodworking,” i.e., coming out of hiding just to enjoy the benefits.

To cover the burgeoning long-term care needs of the “baby boom” generation, the proposal was made that everyone, starting at age 45, for 20 years, in their high-earning years, be allowed to put away (e.g.) \$1,000 a year in a tax-free deposit.

Half the interest would be added to the principal, and the other half would be used to purchase long-term care insurance (LTCI). If the need arose for nursing-home care the principal would be used to pay for this, and when this was used up the LTCI would give about another 16 months’ coverage. If any or all of the amount was unused at death, the money would accrue to the deceased’s estate.

Burke explained that acute catastrophic coverage was meant for acute care of *more* than 300 days; that no new items not currently covered by Medicare would be added, and that Medicaid could buy the Medicare premium on behalf of the indigent.

HMA assisted in providing a panel of respondents from the community, each of whom had an opportunity to comment in Burke’s presentation. Their statements follow in the order in which they spoke:

Gladys C. Fryer MD (From the Hawaii Medical Association):

- 1—What relief will there be for families who choose to look after their frail elderly at home? (Of particular interest in Hawaii, which has the highest female/male employment ratio in the nation.)
- 2—There needs to be a plan to cover long-term care. (Should they suffer a stroke or become demented, the elderly can envisage their life savings being wiped out and/or becoming dependent on relatives.)
- 3—Coverage for home care is at present minimal. If the intent is really to maintain 75% of the elderly at home, this would be a very obvious place to expand benefits.
- 4—An overall plan would be desirable, with some outline of future steps to be taken to enable a complete solution to the problem.
- 5—How would the proposed insurance plan help our present elderly? We need an immediate scheme to enable us to care for patients NOW.

Yun Soon Jim (President of the Oahu Retired Teachers Association):

- 1—Will the State take care of us if we are financially unable to do so? Our members are mostly on small pensions.
- 2—Will the Medicare entitlement age be raised, as has been proposed?
- 3—Will Medicare benefits at least be extended to cover drugs and doctors’ bills?
- 4—If the Medicare beneficiary is unable even to meet the initial \$2,000, will Medicaid pick up this amount?

Jean Lum (Dean of the University of Hawaii School of Nursing):

- 1—Are there any ongoing plans to assist a community like ours to understand the implications of the proposed legis-

lation?

- 2—Education of beneficiaries is very important.
- 3—Assistance for young people suffering from a catastrophic illness is also a necessity.
- 4—What incentives will there be in this program for people to get well and stay well?
- 5—What is the level of preparation for health-care providers? What will the coverage be for what Medicare now calls “custodial care” (i.e., anything less than “skilled nursing care”)?
- 6—What provision is there for decision-making regarding “death with dignity” by both patients and their families?

Joseph Palma MD (Independent Solo Internist):

- 1—Government should be in a leadership role.
The private sector should work with the government. It is the responsibility of government to help without taking away the responsibility from the health-care providers.
- 2—What is the ability of the elderly and working people to take care of their families up front?
- 3—What are the resources of the elderly that would allow them to handle their problems up front?
- 4—Can private enterprise develop a matching program for \$6 per month or \$72 a year?
- 5—There is also concern about the people who “come out of the woodwork” when major new benefits are announced.

Stanley Snodgrass (Executive Director of the Healthcare Association of Hawaii):

- 1—I agree that this was a good beginning.
- 2—Definitions of “catastrophic coverage” and Medicare are essential for the public’s understanding.
- 3—NO Current benefits should be cut to establish financing for catastrophic coverage. Medicare will already be cut by 1½, i.e., by 7% in fiscal 1987.
- 4—Regarding long-term care insurance:
 - Was proposed 2½ years ago.
 - Is the ONLY actuality here today, that holds any promise for those of us here today.
 - A 50% refundable tax credit for those taking out long-term care insurance at age 55 or older would be a realistic incentive.
 - Hawaii is ahead of the rest of the nation with regard to this type of insurance.

Burke’s responses to these concerns follow:

- Snodgrass’ No. 4 proposal was not mutually exclusive of LTC insurance — LTC insurance is a tremendous market opportunity.
- It would take 10 cents a month to set up and operate a “catastrophic coverage” system, and no benefit cuts are anticipated.
- “Catastrophic” is a bad term.
- Medicare was initially modelled after the private-sector system of health care.
- This insurance proposal is budget-neutral; the premium would be adjusted each year. It is budgetable, and outlays could be foreseen. Can private industry do it better?
 - Medicare pays 98 cents out of every dollar collected (private insurance pays only 50 to 60 cents).
 - Medigap policies use fright tactics and are devious.
- There IS concern with quality-of-care issues. The Department is pushing PROS, and is consulting with the AMA and AHCA. The Department is concerned with people staying well.
- Regarding “death with dignity”: There is support for living wills. These have now been enacted in 40 states.

- There will be an increase in the age of eligibility above 65.
- Doctors' payments are now fixed. Drugs will be the next step.
- Regarding premiums: These are indexed to be budget-neutral. They hold harmless provision. Premiums will never go up more than the Social Security benefit.
- The SNF benefit under Medicare is an acute-care benefit, i.e., an extension of the care in acute-care hospitals.
- Regarding benefits for care of the elderly at home: It is not desirable to provide a disincentive to the family to care for their own elderly. We aim to make neutral approach the incentive.
- There is no "quick fix" for the problem of costs of long-term care for those who are already elderly.

In response to points raised by the audience, Burke said that:

- The problems of AIDS are those of sex and blood, and the treatment is education.
- Regarding cigarette smoking: In 1982 the Bowen Commission took on alcohol and tobacco.

- Regarding the Part C proposal by Claude Pepper: This is introduced every year and never gets far because it has only a nominal price tag.
- Regarding several individual cases of too-early discharge from hospital: Medicare does not discharge patients from hospital — only doctors do.
- Regarding nursing-home needs: Medicare pays only for acute-care related conditions. Medicaid pays half the cost of nursing-home care. Only 3% of nursing-home days are covered by long-term care insurance.
- Stays in rehabilitation hospitals are covered the same as in acute-care hospitals.
- Home health care is the fastest-growing component of Medicare (20% a year).
- Much still needs to be done.
- Pilot programs need to be tried.

When asked about professional liability, Burke said Otis Bowen introduced good legislation on this when he was governor of Indiana.

. . . putting it plainly

Long-term Care, Medicare, Medicaid and Alternatives: A Review

Earl W. Fedje STM, CLU, ChFC*

With the signing of the Medicare bill in 1965, President Johnson proclaimed, "Older citizens will no longer have to fear that illness will wipe out their savings, eat up their income and destroy life-long hope of dignity and independence."¹ Today, any American solely dependent on Medicare for protection against the potential expenses due to illness or accident has plenty of reason to fear financial catastrophe.

Due to the soaring inflation of medical-care costs, an accelerated increase in the number of people eligible for benefits as well as greater use of services by those eligible, a wide range of cost-saving/cost-controlling measures have been added to Medicare. As examples, diagnostic related groups (DRGs), utilization review committees (URCs), and peer-review organizations (PROs) have become common usage terms.

Since Medicare took effect in 1966, hospital and skilled

nursing facilities care deductibles, co-insurance, and co-payments have increased by 1,300%. While the deductible for physician's services has only increased 150 percent and the co-insurance percentage has remained the same, limits and freezes on payments have dropped Medicare reimbursement levels to far below current charges.²

The result is that Medicare now pays less than half of the total health-care costs of the elderly. In the case of nursing-home care, Medicare pays less than 2% of total expenditures.³ As a result of the cost of medical care today, a senior citizen can face substantial and, in some cases, catastrophic out-of-pocket expenses.

Current legislation before the Congress concerning "Catastrophic Health Care Coverage" for the elderly has attracted the attention of the public, both the young and the elderly. There is considerable concern and confusion regarding the real "catastrophic cost," namely long-term nursing care. Neither current legislation nor proposals for the future include provisions for long-term nursing care.

This review will consider the magnitude of the problem and touch upon some alternative approaches currently open to a senior citizen.

*President, Planning Services-Hawaii Inc.
Grosvenor Center, Suite 2120
737 Bishop St.
Honolulu, Hawaii 96813

SAVE & RESTORE FATHER DAMIEN'S CHURCH



In 1873, an obscure Catholic priest from Belgium, Father Joseph Damien DeVeuster, arrived on the Island of Molokai as a missionary. When he died in 1889 of

Hansen's disease, Father Damien's work at Kalaupapa was recognized as one of the greatest examples of humanitarianism in history. He was acclaimed worldwide as a Christian hero and martyr.

The focal point of Father Damien's activities, and the source of inspiration and hope for those he ministered, was St. Philomena Church, or Father Damien's Church as it has become known.

Today, the church that Father Damien helped build, and which symbolizes such an important time in

Hawaii's history as well as Hansen's disease worldwide, is in serious jeopardy.

Father Damien's Church is falling down. And your help is needed right now to save it.

The Friends of Father Damien, a non-profit organization, has pledged to raise a minimum of \$500,000 to restore and preserve the historic landmark. April 15, 1989, is the 100th anniversary of Father Damien's death, and the Friends hope that funds can be raised in time to ensure work on the Church will be completed by then.

HELP REBUILD FATHER DAMIEN'S DREAM

By making a donation today, you can help rebuild Father Damien's dream. Simply fill out the coupon and mail it in with your deductible donation.

What a wonderful gift to the

memory of Father Damien, and the aloha spirit which makes Hawaii so unique.

Mail to:
Friends of Father Damien
P.O. Box 6016
Honolulu, Hawaii 96818

Here is my donation for:
☐ \$5 ☐ \$10 ☐ \$20 Other _____

Name (please print)

Street

City State Zip Code

The restoration of Father Damien's Church is a project of the Arizona Memorial Museum Association

Fundraising Committee:

Honorary Co-Chairmen

Governor John Waihee

Bishop Joseph A. Ferrario

Chairman

Maurice J. Sullivan

The Elderly Population: The Scope of the Problem

Today's baby boomers will be the 21st century's grandparents. More and more Americans will live out the promise of a long life as the people who were born during the 15-year period following World War II approach retirement. How many elderly will there be in the decades to come and how many will need to spend some time in a nursing home?

For a perspective on just how quickly the United States is growing gray, and how it might care for its elderly, consider the following demographic factors.

The Census Bureau estimates that the number of people 65 years of age and older will increase by more than 100% from an estimated 31.7 million in 1990 to 64.6 million in 2030 (which is the year today's 22-year-olds reach retirement).⁴

The over-age-85 population, a quarter of which live in nursing homes, will increase by a factor of nearly 3 between 1990 and 2030, from 3.3 million to 8.6 million. By the year 2080, the 85-and-over population will number 18.2 million people, almost six times what it is today.⁵

Charles Wasilewski in *Best's Review*, April 1987, quoting Northwestern Mutual Life, predicts that the number of elderly needing nursing-home care will rise from 10 million in 1986 to 50 million by the year 2010. The American Association of Retired Persons (AARP) estimates that 48% of people over 65 will spend at least one day in a nursing home during their lifetime.⁶

Who Pays for Nursing Care Today?

Nationally, on an aggregate basis, Medicare, the federal system established in 1965 to cover the medical bills of the nation's retired and disabled, paid less than 2% of the \$34.2 billion worth of nursing-home bills incurred in the United States in 1984. Private insurance paid an even smaller portion of the bill (1.1%). The Veterans Administration paid 2%, and other private and public sources paid 3.4%.⁷ Who paid the rest?

The other public program that currently pays for a large portion of nursing-home care is Medicaid. However, Medicaid kicks in only after the "spend down" of a person's assets, until that individual or couple has insufficient funds for payment of health care or long-term care costs. (As presently defined by the federal government, "impoverished" means that individuals have no more than \$447 a month in income and couples have no more than \$603.)⁸

In fact, it was Medicaid, the state/federal medical cost-sharing plan designed for low-income individuals and the medically needy, that paid nearly half of that nursing-home cost (49.4%).⁹ The Oct. 13, 1986, issue of the *Wall Street Journal* reports that about 8% of all Medicaid recipients are in long-term care facilities, but they account for 47% of the Medicaid budget.¹⁰

Again, who pays the remaining 42.1%? The patient pays, or the surviving spouse pays, or the family pays, \$17 billion annually.

Nationally, the average cost for an individual's nursing-home care is \$22,000, according to the Department of Health and Human Services (DHHS). The average stay in a nursing home is longer than one year, according to the Health Insurance Association of America (HIAA). The costs per day range from \$60 to about \$140.¹¹

In the State of Hawaii, a study conducted by the Healthcare Association (HCA) indicated that in 1985 the average lifetime stay in a nursing home was 1.6 years, or 600 days. Presently, this stay has increased to 2.5 years, or 900 days. Two years ago,

Medicare paid for an average of 27 days, or 2% of the cost. In 1986, it paid for only 17 days, or 1.7% of the costs on the average.¹²

"Ms. Jenckes," an HIAA representative, reports that "More than half of the people who are in nursing homes have spent down their assets, to the Medicaid required level."¹³ The cost of long-term care can be devastating. The House Select Committee on Aging, for example, estimates that most elderly Americans forced to live in a long-term care facility are impoverished within a year.¹⁴ Their savings and other financial assets are eroded until, finally, all they possibly have left is a monthly Social Security or pension check. Too often, this isn't enough to pay the institution's bill, and the patient, or his or her spouse and/or family, must seek public assistance.

The demand on Medicaid will increase as the total expenditure for nursing-home care grows with the projected increase in the nursing-home population.

The Nature of the Problem: Misinformation

Why is it that so little is covered by Medicare and so much is paid either "out-of-pocket" by the patient, by his or her family, or finally by Medicaid after reaching a so-called poverty level, in the face of President Johnson's assurance given in 1965?

Is it because most of the elderly population and their families have been misinformed regarding who will pay for their long-term care? In 1985, the Gallup organization conducted a survey for the AARP that indicated that 79% of the elderly believed that Medicare would pay for an extended stay in a nursing home. Of this group, 50% believed that whatever supplemental Medicare insurance they purchased would also cover an extended nursing-home stay. In fact, Medicare as well as most supplemental insurance policies pay only for the first 100 days of care beyond an acute-care hospital stay and then *only* if care is given on a "skilled nursing level" (SNF).¹⁵ *Neither Medicare nor most supplemental coverages, such as HMSA 65-C, Kaiser Senior Plan, or state and federal retirement medical insurance plans, cover intermediate or custodial care.*

The following is a series of myths or perceptions lifted out of the 1985 Gallup survey, along with reality responses.¹⁶

Myth: With Medicare, one doesn't need any other health insurance.

Reality: Medicare pays for less than half of the total health cost of the elderly. Therefore, a supplemental plan to cover acute and SNF care should be purchased at age 65.

Myth: Medicare pays for nursing-home care.

Reality: Medicare can pay for some extended care confinements, under certain circumstances. However, it is far more limited than many people imagine, and in fact rarely covers beyond 20 days of such care.

Myth: Insurance supplemental to Medicare will pay for what Medicare does not cover, including nursing-home expenses.

Reality: With limited exceptions, most currently available supplement insurance only pays for Medicare deductibles and co-payments for services that are covered by Medicare. If there is no coverage from Medicare, there is no coverage by the supplement.

Myth: Medicare now pays for long-term care in the home.

Reality: Medicare's home health-care benefits are for people needing short-term intermittent skilled nursing care to assist the recovery from an illness or injury.

Myth: Veterans don't need long-term care coverage.

Reality: Because of the shortage of beds most admissions to VA nursing homes are limited to active-duty personnel or those with a service-connected problem.

Myth: One doesn't need long-term care insurance if still in good health.

Reality: You can only obtain insurance for long-term or custodial care while you are in reasonably good health. When you need or are about to need long-term care, it is too late to buy most insurance. Therefore, it should be purchased when healthy at age 50 or so.

Myth: A truly loving, caring family would never allow a parent or relative to be placed in a nursing home.

Reality: Placing a loved one in a nursing home is a wrenching experience for anyone. But family circumstances or the special care needs of an individual are often such that placement in a nursing home is the only sensible option.

Myth: One doesn't have to worry about long-term or nursing-home care, because one can always depend on Medicaid.

Reality: Although Medicaid does pay for nursing-home care for the impoverished, one must first spend down most of one's assets in order to qualify for this form of welfare. Medicaid provides only limited coverage for home health care. Access to quality nursing homes may not be easy if one is on Medicaid.

Requirements for Medicare Long-term Care Coverage

Medicare only pays for the cost of 20 full days of skilled nursing care in a Medicare-approved facility, and a part of the cost for the next 80 days. But, in order for a person to be reimbursed by Medicare for a stay in an SNF, he must have received at least three days of acute care in a Part A covered hospital; must receive medically necessary confinement in a participating bed in a participating skilled nursing facility, but *only* for as long as the patient requires daily skilled nursing care or rehabilitative services.

Part A will pay for all covered services for the first 20 days of continuous confinement and all but the co-payment for the next 80 days (\$65 per day in 1987), provided that all of the following conditions are met:

- 1—Admission is within 30 days following a Part A covered hospital stay of at least three days (not counting the day of discharge).
- 2—Admission is for care for a condition that was treated in the hospital.
- 3—A physician certifies need for, and the patient actually receives, skilled nursing or skilled rehabilitation services, or both, on a daily basis, which, as a practical matter, can only be provided on an in-patient basis in a skilled nursing facility.
- 4—The facility's utilization review committee (URC), or a peer-review organization (PRO) does not disapprove the stay. Covered services are specified in detail.

Most nursing-home care is not covered by Medicare. Medicare does not and was not intended to provide comprehensive long-term care coverage. It is intended to provide hospital acute care, short-term, post-hospital, sub-acute convalescent care, but not intermediate-level care and not custodial-level care.¹⁷

As a result, it is rare for a patient to receive Medicare coverage in an SNF for more than 20 days; usually it is less.

As Sylvia Porter states: "If you are a typical older American, you face severe economic hardship when confronted with a long stay in a nursing home. The only Americans not exposed to this

risk are either so wealthy that nursing-home costs are inconsequential, or so impoverished that they already qualify for Medicaid."¹⁸

Alternative Solutions

What then are the options in funding this potential risk?

- Medicare
Medicare provides only a limited acute-care coverage. If faced with an average Hawaii lifetime stay of 900 days at an average cost of \$100 per day allowing 20 days paid for by Medicare one would still face a potential \$88,000 drain on assets.

- Medicaid
By spending down, or transferring assets to surviving children two or more years prior to the need to enter a long-term care institution, one can qualify for a Medicaid-approved facility, if beds are available. One then becomes a ward of the state, essentially without much control of one's future.

- Self-insure
A third method of funding the costs is to self-insure. Congress is currently considering an idea proposed early this year by HHS Secretary Bowen, namely the establishment of an "Individual Medical Account" (IMA), similar to an IRA into which a person contributes over the course of a lifetime. However, Congress appears to be reluctant to change the tax code again this year following the Tax Reform Act of 1986, even if the offset to the Treasury resulting from a lesser demand on Medicaid were to appear favorable.¹⁹ An adequate fund to self-insure would require a minimum of \$80,000 for each senior member of the family and the fund would, of necessity, be "untouchable" until applied. Tax-deferred, moderate interest rate, limited risk annuities provide an ideal, inflation-adjusting vehicle for such an approach.

- Private Insurance
A fourth alternative to funding long-term care cost is the purchase of private insurance. Raymond Hanley, a senior research analyst at the Brookings Institution and co-author of the *Long-term Care Monograph* sees "its (private insurance) place for people who are private-pay patients."²⁰ As indicated earlier, these private pay-patients constitute a full half of the nursing-home population.

A quality product can be acquired at reasonable rates at an early age (50) while in good health. Consequently, early planning in this area can be most cost-effective.

There is considerable debate on the issue going on in Washington. There exists an ignorance of the problem in the rest of the country. Most importantly, there must be widespread support for educating the public concerning which medical and health-care expenses are and *are not* covered by Medicare and Medicaid programs, by Medigap policies, and by private health insurance (90% of the latter are provided through employer contributions).

The Health Insurance Association of America strongly advocates an educational effort to close this knowledge gap.

REFERENCES

1. Larson D: A Comprehensive Guide to Medicare and Health Insurance for Older People: 1, 1987.
2. *ibid.*
3. *ibid.*
4. Wasilewski C: Mature Customers, Immature Products. *Best's Review*: 87:12:41, April 1987.

5. *ibid.*
6. Health Insurance Overview. *Best's Review*: 87:12:39, April 1987.
7. *op. cit.*, Wasilewski, 46.
8. Scheibla SH: Easing the Pain, the Drive to Insure Against Catastrophic Illness. *Barrons*: June 2, 1986.
9. *op. cit.*, Wasilewski, 46.
10. Slater K: Insurance for Nursing Bills Can Be Costly, Leave Holes. *The Wall Street Journal*: 13, Oct 13, 1986.
11. *op. cit.*, Wasilewski, 41.
12. McCord R: Healthcare Association of Hawaii.
13. *op. cit.*, Wasilewski, 41.
14. *op. cit.*, Scheibla.
15. Hoover JB, Balter J: Long-term Care Insurance: An Emerging Growth Opportunity for the Nursing Home Industry. Institutional Research for Investment Bankers Robertson, Colman & Stephens: July 29, 1986.
16. *op. cit.*, Larson, 2-3.
17. *op. cit.*, Larson, 7.
18. Porter S: Nursing Home Insurance Can Save You Great Expense. *Honolulu Star-Bulletin & Advertiser*: June 14, 1987.
19. *op. cit.*, Wasilewski, 46.
20. *op. cit.*, Wasilewski, 44.

. . . the light at the end of the tunnel

On Long-Term Care Insurance

Stanley B. Snodgrass*

In its 1987 Environmental Assessment, the American Hospital Association Research and Educational Foundation has commented in considerable depth about the continuing and accelerating problems of the aged. It stresses several points: "Baby Boomers" and the elderly are the largest and fastest-growing segments of the U.S. population.

Baby Boomers

- 76 million (one-third of population)
- Aged 22-40 in 1986
- Highly educated
- Early/middle stages of career
- High-debt years
- Health-care needs focus on obstetrics, pediatrics
- As they and their parents age, there will be increased concern about the health-care needs of the elderly.

Elderly

- The fastest-growing segment
Between 1970 and 1985
- 65 + rose 40%
- 85 + rose 89%
- Fastest growth still ahead

In the next 20-30 years, the dependency status of the over-65 age group will change remarkably, suggesting that as the baby boomers move through their 40s and 50s, a growing number may be responsible for the care of both elderly parents and probably grandparents.

Our Healthcare Association of Hawaii (HAH) has been aware of the emerging demographics of the population, coupled with the lowered activity of the Medicaid program, which has con-

sistently diminished both the numbers and the resources for the elderly. (Between 1981 and 1986, the average number of Hawaii Medicaid beneficiaries 65 and over has decreased from 8,743 to 7,718 despite a numerical increase of persons over-65 in the opposite direction.)

Medicare, as presently constituted, is of little value beyond acute care except for very short duration in skilled nursing facilities (SNF). It is of no value for extended periods in intermediate care facilities (ICF). The Medicare Catastrophic Plan being considered in Congress will be a small step of relief for the elderly, but nothing of significance since it does not address nursing-home care.

The two programs — Medicaid for the extremely needy and Medicare for the over-65 age group — are steadily diminishing in value for long-term care.

About three years ago, HAH became aware of the possibility of insurance to protect the elderly in their most vulnerable area: Long-term care institutionalization. There is now a considerable range of insurance companies whose policies cover these institutional, home care, and various outpatient services. Having introduced the concept of long-term care insurance to Hawaii, we feel that it is more than fortuitous that the demographics of an emerging population of relatively affluent Baby Boomers, and the over-65 population who are relatively more affluent (when compared with their predecessors), are now finding the various insurance programs they need in order to protect themselves and their assets.

Our original thesis for agreeing to assist in the marketing of long-term care insurance was based on the belief that it would:

- 1—Meet an unmet community need, i.e., assist the elderly to protect their assets.
- 2—Develop new revenue sources for health-care providers.
- 3—Help alleviate the increasing costs of Medicaid.
- 4—Provide a mechanism for family members to support and assist their parents and grandparents.

We have sponsored legislation — still pending — to allow

Accepted for Publication September 1987

*President, C.E.O.
Healthcare Association of Hawaii.

COCAINE IS GETTING BETTER AND BETTER.

How many products do you know of where the quality keeps going up, while the price keeps coming down?

Well, that's just how it is with cocaine these days. The supply is plentiful. The purity is frightening. And, yes, the cost is way down: as little as five dollars can buy a hit of crack.

Unfortunately, the price the rest of us pay has gone sky-high. Not only is cocaine, in all its forms, more available, but the potency is resulting in a plague of mental and physical disorders, from acute anxiety and depression to sudden heart failure and death.

In just the last 12 months, there have been 7 cocaine-related deaths reported in Hawaii. Reported.

Then there's the crime and violence that go hand-in-hand with intoxication and addiction.

Some people still think cocaine is glamorous. Or harmless.

It isn't either.

And it won't go away if we ignore it.

If you have friends or family who use cocaine, get involved. Give them a rough time. Because, if you don't, it's certain the drug will.

COCAINE. IT'S NOT FOR ANYBODY.

Call for help or information,
24 hours a day: 537-1678.

A public service message from the Honolulu Council, American Association of Advertising Agencies and this publication. Typography supplied by Pacific Photo Engraving, Inc.; engraving supplied by Honolulu Graphic Arts, Inc.



CLASSIFIED NOTICES

To place a Classified Notice, call Lellani at 521-0021.
4 line min., approx. 5 words per line.
Payment must accompany order.

EMPLOYMENT OPPORTUNITIES

MAUI

PEDIATRICIAN (B.C./B.E.) Needed for multispecialty professional corporation on the lovely Island of Maui (Kaiser Permanente). Salary depending on qualifications. Excellent fringe benefits. Full malpractice coverage.

D.L. McCleary, M.D.
Kaiser Wailuku Clinic
80 Mahalani Street
Wailuku, HI 96793

(An Equal Opportunity Employer)

FAMILY PHYSICIAN/G.P.

To join two F.P.'s in a rapidly expanding practice in Kaanapali, Maui. Contact Ben Azman M.D., 2435 Kaanapali Parkway, Lahaina, HI 96761. Ph. (808)-667-9721.

MAUI

GENERAL INTERNIST OR FAMILY PRACTITIONER (B.C./B.E.) needed for multispecialty professional corporation on the lovely Island of Maui (Kaiser Permanente). Salary depending on qualifications. Excellent fringe benefits. Full malpractice coverage.

D.L. McCleary, M.D.
Kaiser Wailuku Clinic
80 Mahalani Street Wailuku, HI 96793
(An Equal Opportunity Employer)

KAISER PERMANENTE ON OAHU looking for physicians. Offers wide range of family practice, including obstetrics, in small-to-medium-sized clinic settings. Residency training, board certification preferred. Send C.V. to: Hawaii Permanente Medical Group, Inc., 3288 Moanalua Road, Honolulu, HI 96819.

(An Equal Opportunity Employer)

OFFICES

Medical space for rent or lease in Downtown Wailuku, Maui. 850+ sq. ft., 3 examining rooms, office, nurses station & more. 30 N. Church St. Wailuku, HI or phone 808-242-6691.

OFFICE SPACE

Historic renovation. Downtown. Below market rate. From 700 sq. ft. to 6,000 sq. ft. Parking available.
Dave Lewis (R) 537-4567

SERVICES

DOCTORS: Does your office need upholstery work? Classic Auto Treasures Upholstery Division has expanded their expertise. We now provide a 1-day upholstery service on exam tables, office chairs, furniture, etc. Wide range of colors of top of the line vinyls and fabrics.
846 Pohukaina Street 537-1100.

deduction of long-term care premiums from individual income taxes.

As recently as one year ago, there was little knowledge on the part of seniors that their life savings were in jeopardy when illness required nursing-home care. The media and the government both have heightened this awareness by revealing the inadequacy of Medicare and its failure to seek any remedy for nursing-home costs, as well as the "spend-down" requirement imposed by Medicaid.

All available demographics indicate that the emerging long-term care insurance programs will provide the necessary relief in the coming decade. The awareness factor is now coupled with insurance products that are not only priced for consumer acceptance but are sensitive to the needs of the individual. It is interesting to note that in the past two years, we have seen four generations of long-term care policies come to the market place, with more being designed.

The July 20, 1987, AHA News (the Newspaper of the American Hospital Association) reports that Connecticut and Massachusetts have imposed especially important measures to protect the elderly. The Connecticut Plan includes:

- Funding preventive measures to keep elderly people healthier.
- Improving methods to finance long term-care through employers, banks and insurers.
- Creating a long-term care insurance risk pool.
- Expanding, via case management,

home- and community-based care services.

- Screening of nursing-home candidates before admission.
- Educating the public about the need for long-term care insurance and about some "unscrupulous practices" in the long-term care market.

Massachusetts is taking a slightly different tack with a program that includes:

- Establishing an insurance plan that would offer low premiums and state-subsidized deductibles.
- Waiving Medicaid asset rules for elderly people who buy private long-term care insurance.
- Offering tax incentives and home-equity conversion to aid in the purchase of long-term care services.
- Educating the public on the need for long-term care insurance.

The chairman of the Connecticut Long-Term Care Commission called for "federal tax incentives to encourage the financing of long-term care through savings, insurance, family-member contributions and family caregiving . . . a response by Connecticut alone or by a collection of states cannot be sustained without complementary national initiatives."

On April 1, 1987, there were some 487,000 long-term care policies in effect in the U.S. (a doubling in about one year). In Hawaii, through our organization alone, there are some 300 policies in effect with a total value of approximately \$58 million.

HMA Committee Reports

Marvin Hall, president of the Hawaii Medical Service Association, discussed HMSA's plans to address the need for long-term care insurance at a recent meeting of HMA's Chronic Illness and Aging Committee.

According to Hall, July 1, 1987, was the committee's target date for introducing its new program of coverage. In June, this program was being developed and refined.

Hall began his presentation by noting that HMSA already offers three insurance plans that are supplemental to Medicare. In addition to covering deduc-

tibles and co-insurance that the beneficiary has to pay, these plans also cover up to 100 days of skilled nursing facility (SNF) care. Still, these programs do not cover what many perceive to be the pressing needs in the provision of long-term care insurance — coverage of intermediate care facilities (ICF), care home and chronic home care.

A major challenge in designing an insurance program to cover all levels of long-term care stems from the fact that no good actuarial data exists upon which to base cost projections. Another concern is that, instead of spreading the risk across a large group, this type of in-

From the Chronic Illness and Aging Committee

surance plan tends to be purchased by a relatively small group already at higher risk for institutionalization.

This process of "self-selection" has led to the creation of plans in which a significant amount of screening, prior to accepting the applicant, has to be done. Many plans have an age limit at which they can be purchased as well as clauses that exclude those with a pre-existing condition. Policies currently being marketed in Hawaii vary tremendously in the options that can be purchased. Premiums for a comprehensive program of coverage can be quite costly.

Hall described a phenomenon that we are seeing more frequently these days. An elderly person transfers his, her, or their assets and impoverish themselves to qualify for State medical assistance.

Said Hall: "The idea that you're entitled to coverage by the State via Medicaid is becoming increasingly acceptable."

He briefly discussed some of the federal initiatives currently being explored to address these needs. He felt that there was a general misunderstanding of the Bowen plan endorsed by the president, which was designed primarily to cover catastrophic illness in the Medicare-age group and didn't even begin to address long-term care needs beyond the acute hospital setting.

A suggestion to allow tax-free individual medical accounts (IMAs) for coverage of future health-care needs is also fraught with problems, he said. As HMSA continues to consider what elements to include in its extended-care plans, it intends to offer a product that doesn't merely duplicate other plans in the market. HMSA wants to "keep it as broad as we can do it," said Hall. HMSA wants to strengthen chronic home-care benefits and to evaluate the possibility of payment for homemaker or chore service.

He did note that although HMSA's emphasis has always been on community-based services, the provision of home care is much harder to monitor. HMSA will be developing a system to assure that the patient is receiving the proper level of care while receiving benefits, as it has for its other plans.

Hall closed his discussion by saying that suggestions from HMA members regarding the design of this plan will be welcome.

Submitted by Ellen Garcia MPH, coordinator, Senior Health Program, Straub Clinic & Hospital, and Walter B. Quisenberry MD MPH Chairman, HMA Chronic Illness and Aging Committee.

*The law firm of
Reinwald, O'Connor, Marrack & Hoskins
is pleased to announce that*

Kelvin H. Kaneshiro, D.M.D.

has become an associate of the firm.

*Dr. Kaneshiro will concentrate his practice
on health care law.*

*Among the firm's major areas of practice
are commercial litigation, general business
and corporate law, insurance defense,
construction, tax, health care and hospitals,
real estate, wills, estate planning
and probate.*

Reinwald O'Connor Marrack & Hoskins

Attorneys at Law since 1876

733 Bishop Street, Grosvenor Center

PRI Tower, Suite 2400

Honolulu, Hawaii 96813

Telephone 524-8350

**Next time you feed your face,
think about your heart.**

Go easy on your heart and start cutting back on foods that are high in saturated fat and cholesterol. The change'll do you good.



American Heart Association
WE'RE FIGHTING FOR YOUR LIFE





What Is The State of Your 1987 Taxes?

If you are an Hawaii resident, in 1987 you could pay up to 42.02% in taxes to the state of Hawaii and to the federal Government. (Based on the maximum 1987 federal tax rate of 38.5% and the Hawaii state tax rate as of 10/1/86.) Now is the time to take a close look at the tax advantages of Seligman Tax-Exempt Fund Hawaii Series!

The Series Offers:

- INCOME EXEMPT FROM FEDERAL INCOME TAXES
- INCOME EXEMPT FROM THE PERSONAL INCOME TAX OF HAWAII

It's Time to Choose a Professionally Managed
Double Tax-Exempt Bond Portfolio

INVESTIGATE SELIGMAN TAX-EXEMPT FUND
HAWAII SERIES

EF Hutton

E.F. Hutton & Company Inc.

2500 Pauahi Tower, 1001 Bishop Street
Honolulu, Hawaii 96813
(808) 521-2961

Yes! Send me a prospectus which contains more complete information on Seligman Tax-Exempt Fund Hawaii Series including information about the sales charges and other expenses. I understand that I should read it carefully before I invest.

MAIL THIS COUPON OR CALL 521-2961 TODAY!

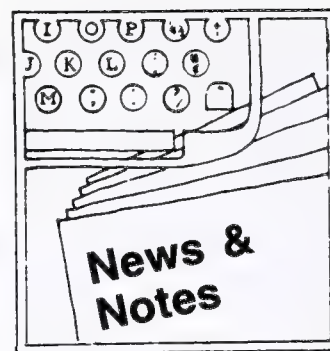
NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

DAYTIME PHONE _____ HOME PHONE _____

6 87



HENRY YOKOYAMA, MD

Life in These Parts I

Kailua psychiatrist Mark Stitham, recent big winner on "Jeopardy," says a person who eats too much Haagen-Daaz, suffers from "Cholusteral" . . . /Don Chapman Jul 31.

While a few Kalaupapa residents wanted their grandchildren to visit them, State Board of Health chairman Ralph Beddow learned that most of the patients feel that Kalaupapa is not an appropriate place for children . . . Under the current policy, no one under age 16 is allowed in the settlement, but residents can leave the settlement to visit their families and friends . . . DOH director Jack Lewin flew to Kalaupapa in June personally to discuss the issue with residents and learned that 90% of the patients opposed the idea. . . .

In the wake of two successful heart transplants and the death of Hawaii's third, Richard Moreno who led the transplant team at St Francis Hospital says Maralyn William's death will not deter the transplant program . . . "We are dealing with patients who are terminally ill. If a patient is in dire need of a transplant and we have a suitable donor, we will continue doing it."

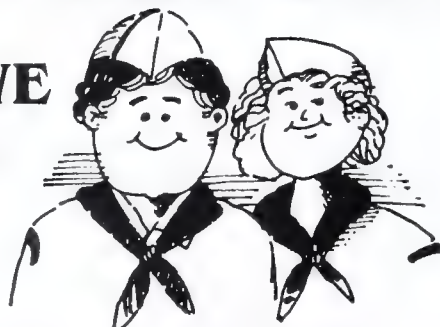
Kauai Medical Group orthoped Larry Magnussen, served several weeks this summer in Pakistan as an International Medical Corps volunteer helping those injured in the conflict between the Soviet Union and Afghanistan . . . The IMC trains Afghan refugees living in Pakistan to return to their native country as medics to help the war victims . . . Larry became sympathetic to the Afghan cause and believes that the soldiers fighting for their homeland are being treated unfairly in the world of international, superpower politics. . . .

A \$1.1 million private surgicenter near Maui Memorial Hospital has been approved by SHPDA and could be built by the end of the year. There had been concern that the private surgicenter would take paying patients only, leaving the State-run Maui Memorial with Medicare and or Medicaid patients only, but this concern has been resolved. . . .

The Lucy Henriques Medical Center in Kamuela opened in 1977 to provide only outpatient and emergency care to a community of 2,200 residents, but it now serves as many as 15,000 people. The Waimea Medical As-

YOUR MONEY HELPS SCOUTING,

**AND WE
THANK
YOU.**

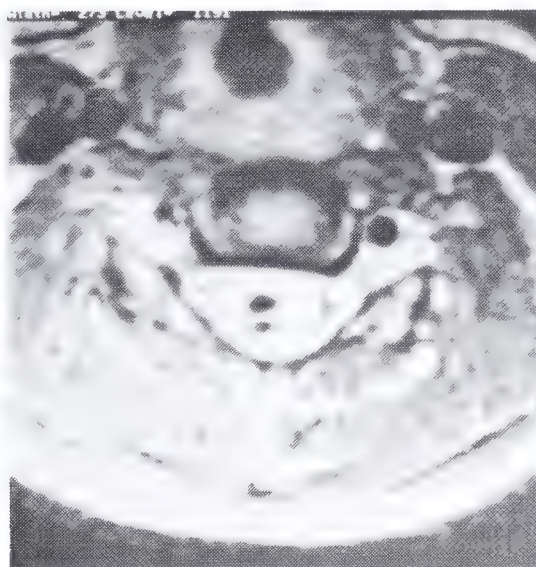
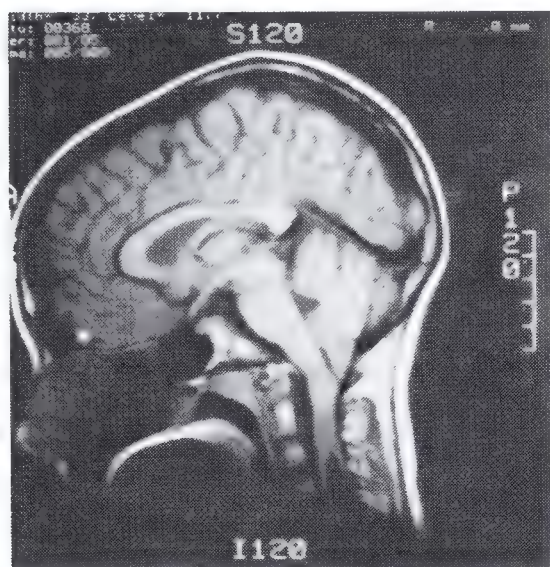
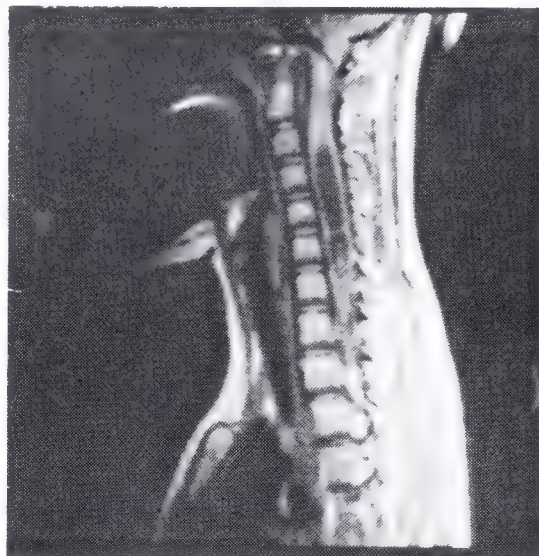
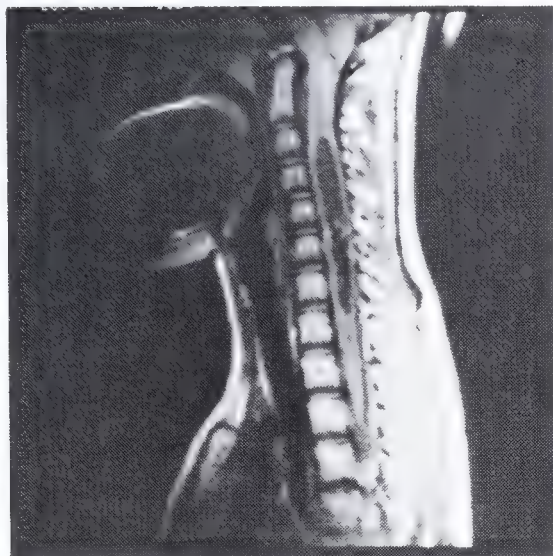


Aloha United Way

MRI CASE OF THE MONTH

SYRINGOMYELIA

Clinical information: Sixteen year-old female with increasing headaches.



*These images were produced by MRI Center
of the Pacific using their 1.5 Tesla GE Scanner.*

Radiologic Diagnosis: The above films demonstrate a triple syrinx of the cervicothoracic spinal cord in evolution. The lower most, more linear cavity represents a spontaneously collapsed syrinx which had been demonstrated eighteen months prior to this examination. The central cavity, containing a septation and low signal intensity CSF was noted on a repeat study approximately six months prior to this examination and is unaltered.

A third cavity has appeared since that time extending from the mid portion of C2 to the apex of the middle cavity and containing somewhat higher signal intensity material, presumably representing a mixture of degenerated tissue and CSF.

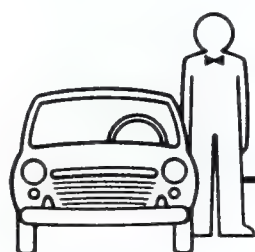
An Arnold-Chiari Type II malformation is noted with classic "pegged" cerebellar tonsils.



42A Ahui St.
Honolulu, HI 96813
Phone 531-6841
Hours: 8:00-5:00 Monday-Friday

"I don't have time to drop off my car for service — CarKeepers does. I never leave my office."

**Discover the
Complete Maintenance Program . . .**



CARKEEPERS

**the general practitioner for your car
533-1356**

KOKUA

Since 1979, high standards of integrity and professionalism have enabled Kokua Nurses to become the top temporary medical placement company in Hawaii for nurses and para-professionals.

**Kokua Nurses &
Kokua HOME HEALTH AGENCY**

Specialists in Private Duty Nursing,
Hospital and Office Staffing.
Licensed and Certified for
Medicare/Medicaid Reimbursement

**RN'S • LPN'S • Nurses Aides
Medical Assistants
Travel Nurses • X-Ray &
Medical Technicians • Physical
& Occupational Therapists
Medical Social Workers
RN Supervision • Speech
Pathologists**

Kokua Nurses

**ON CALL 24 HOURS 536-2326
1210 Auahi Street**



APPLICANTS WELCOME

sociates, a private group practice leases office space in the center. John Dawson, chairman of the group feels that the center may soon expand into a hospital. . . .

State funds are being used to help six obstetricians defray increased malpractice insurance costs in an effort to maintain delivery services in rural areas . . . The six OB men are James Lyons of Kahuku, William Colliflower of Kona, Robert Cary of Lanai, David McNaughton of Honokaa, Randall Doner and Margaret Johnston-Kitazawa of Ka'u. As part of the 1986 Tort Reform Act, the State Legislature had authorized the insurance commissioner to distribute \$100,000 in subsidies to communities that would otherwise lose or be without OB/Gyn services. . . .

Thirteen of 60 ambulances in Haaii will be recalled by Ford Motor Co because of fuel fires experienced on the Mainland . . . Ford is recalling 20,000 E-350 ambulances — at least 75% of the nation's fleet. . . .

A Department of Health 2-year survey of 6,600 persons reveals that Hawaii residents worry most about chemical pollution as a public health concern, and what they eat as a private health concern . . . They say that regular exercise is their way to stay healthy . . . Doctors were by far the main source of health information for 41% of the respondents. . . .

The Pacific In Vitro Fertilization Institute at KMCWC takes credit for its first test tube twins born in Osaka, Japan. The parents, Japanese citizens, transferred back to Japan after living in Hawaii for five years. Francis Terada, the couple's physician in Honolulu, was thrilled when he learned of the births . . . Francis says five embryos were implanted in the woman's womb and the twins are a result of two embryos surviving . . . The Institute, which started in March 1985, has had 80 patients, and in its second year of operation its 28% success rate surpasses the national rate of 15%. . . .

**Elected, Honored
& Appointed**

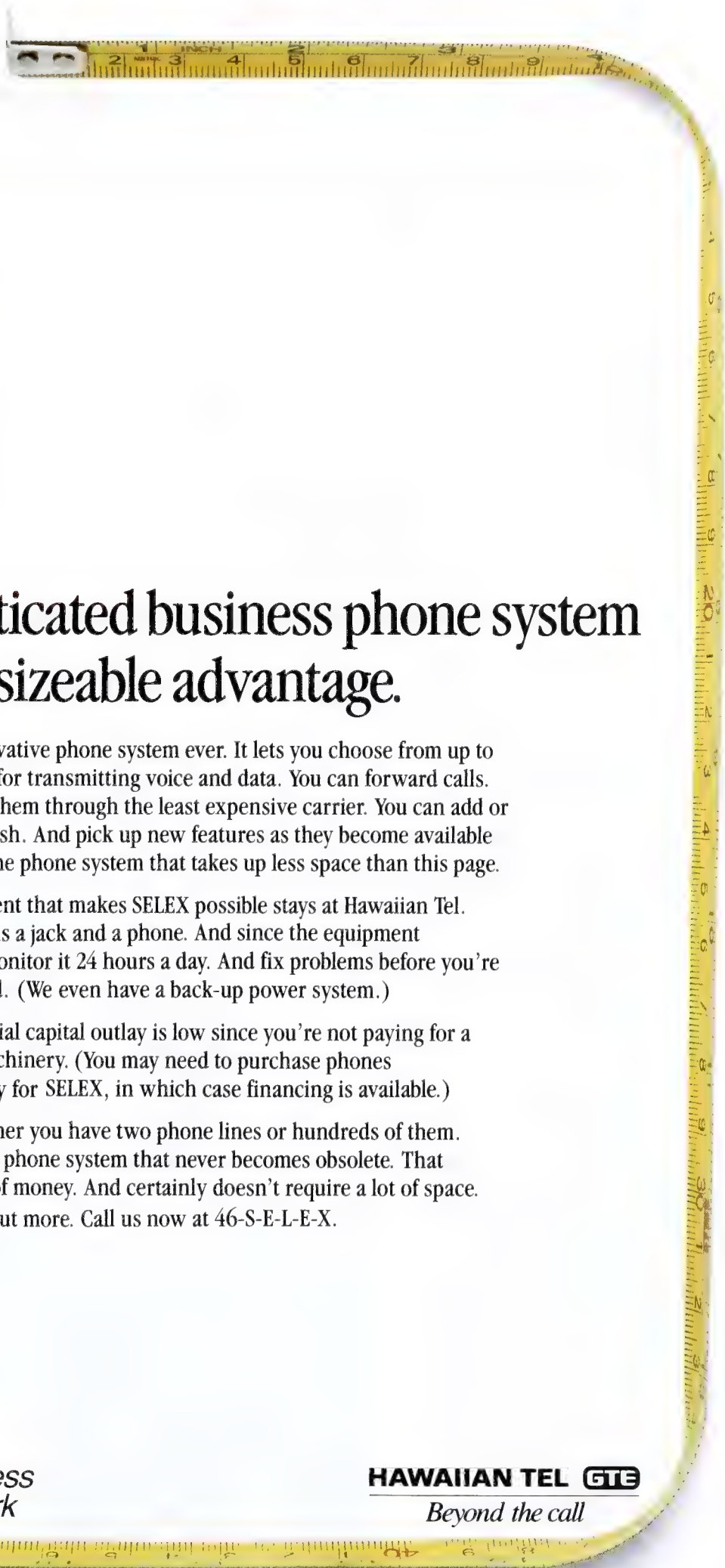
Cal Sia was honored with the Kauka Kanali'i Award at a joint dinner of the Hawaii chapters of the American Academy of Pediatrics and the American College of OB/Gyn . . . Cal helped Senator Inouye write a bill for a demonstration program for organized state emergency services for children and was involved in a demonstration project for the Family Stress Center to prevent child-abuse, by yearly intervention. . . .

Wasim Admad Siddiqui, professor of tropical medicine, received the Regents' Excellence in Research Award for his work toward development of a malaria vaccine. . . .

O.D. Pinderton was given an Outstanding Service to the Medical Community Award by the Hawaii Ophthalmological Society in January. . . .

The Hawaii Ophthalmological Society also elected Shigemi Sugiki a president; Calvin Miura, VP; George Plechaty, secretary; John Drouilhet, treasurer; and Malcolm Ing, member-at-large.

Scott McCaffrey, head of Kaiser Per-



Our most sophisticated business phone system has a sizeable advantage.

SELEX is our most innovative phone system ever. It lets you choose from up to 100 advanced features for transmitting voice and data. You can forward calls. Transfer them. Or route them through the least expensive carrier. You can add or drop features as you wish. And pick up new features as they become available in the future. All with the phone system that takes up less space than this page.

You see, the equipment that makes SELEX possible stays at Hawaiian Tel.

So all you need is a jack and a phone. And since the equipment stays with us, we can monitor it 24 hours a day. And fix problems before you're ever affected. (We even have a back-up power system.)

With SELEX your initial capital outlay is low since you're not paying for a bunch of machinery. (You may need to purchase phones designed especially for SELEX, in which case financing is available.)

SELEX is ideal whether you have two phone lines or hundreds of them.

It's the worry-free phone system that never becomes obsolete. That doesn't require a lot of money. And certainly doesn't require a lot of space.

Find out more. Call us now at 46-S-E-L-E-X.

SELEX Business
Network

HAWAIIAN TEL GTB
Beyond the call



CONTINUITY-OF-CARE™

24 HOURS A DAY

By combining your expertise and ours for complete patient care, our flexible Continuity-of-Care™ programs enable us to design the optimum home care program for you.

Hawaii's most complete homecare supplier



500 Ala Kawa Street
Honolulu, Hawaii 96817
845-5000

*Did
you
know?*

Did you know that Saint Francis Medical Center is now a surgical leader?

The only one doing organ transplants, both kidney and bone marrow, and a leader in laser surgery.



**Saint Francis
Medical Center**

Discover the Difference



manente's industrial clinic, has been named the ass't medical director for the Mt Everest expedition being sponsored by the Snowbird Ski Club of Utah in Sept. . . .

J.I. Frederick Reppun and Lincoln K.W. Luke, two of Castle Medical Center's first practicing physicians have been named to the honorary medical staff and recently honored by the board of trustees. Fred served three years as chief of staff and Luke for two. . . .

J. Craig Holland, endocrinologist at Tripler, has been elected president of the American Diabetes Association, Hawaii Affiliate, Inc.

The Hawaii Heart Association elected David Fergusson, president; John Brogan, chairman; Martin Rayner, president-elect; Kipling Adams, chairman-elect; Susan Bourke, treasurer; Lelanda Lee, secretary, Marion Melish is one of the directors. . . .

Kona Hospital named OB/Gyn man Santad Sira "Physician of the Year" . . . Santad is the only obstetrician delivering babies at Kona Hospital.

Personalities . . .

(by Don Chapman of the ADVERTISER. . .)

"Robert Flowers named in May issue of Town and Country magazine as tops in the country in eyelid surgery. . . .

"Duncan McDonald gets those flashy running togs from Bob Burns at Local Motion . . . (6/16/87).

"Scott McCaffrey of Kaiser, ass't medical director for the Mt Everest expedition leaving in August . . . It's the last permit that the Nepal gov't will issue this century for the South Col route to the top of the world. . . . But the climb couldn't be any tougher than a previous assignment for Scott — he once headed the medical tent at Rolling Stones concert in Colorado attended by 75,000 people, 500 of whom required medical attention. . . . (7/23/87)

"Wesley Young, medical dir. for the SS Constitution and SS Independence, just can't get enough. For his vacation, he's working as ship's doctor abroad the SS Rotterdam. . . . (6/30/87)

Miscellany

Bumper Sticker: "Non smokers make tastier kissers. . . ."

The bar was closing, and Charlie had to use the john . . . The janitor was cleaning the mens' room, so Charlie asked the bar-tender: "Can I use the lady's room?" The bar-tender warned, "Sure . . . But just don't touch those buttons!" Charlie sat on the john . . . then noticed four labeled buttons . . . The first said, "WW." Curious Charlie pushed the button and warm water sprayed forth . . . The next button said "WA" and when he pushed it, warm air dried his bottom . . . He pushed the next button "WP" and the warm powder felt great . . . By now, Charlie had completely forgotten the bar-tender's warning and he

(Continued on page 450)

Honoring Kenneth Haling MD

Maui has exploded — more people, more motor vehicles, and a newly enacted law that mandates formal training (residency) and Board Certification in Forensic Pathology for the position of Coroner's Physician on Maui.

I'd like to tell you a little about the years 1968 to 1987, the years Kenneth Haling MD was our pathologist, performing all our autopsies. After graduating from Yale University and New York Medical College, he was in an internal medicine residency program interrupted by service in the U.S. Army Medical Corps in Korea from 1955 to 1957. In 1958 he entered an Ob/Gyn residency at Queen's Hospital.

From 1958 on, he served as a "Government Physician" on Maui, which meant he had to perform autopsies. From 1968 on, he became Coroner's Physician, County of Maui.

In 1968 to 1969, at his own expense, he studied the coroners' and medical examiners' operations in San Francisco and Los Angeles as well as police/murder investigation routines. Since 1976 he has attended annually, at his own expense, Forensic Medicine Workshops at Colby College, Maine, under the auspices of the State Medical Examiners of Maine. In 1978 he assumed medical care of the Maui Community Correctional Facility two evenings a week, doing physicals and sick calls, making emergency calls at the jail.

Haling, who is certified by the American Board of Family Practice, has served as Maui County Medical Society president and as chief of medicine and Ob/Gyn Departments of Maui Memorial Hospital.

Such a man must have a supportive and loving family.

Imagine the number of reheated and overheated dinners Mrs. Haling has cooked and served during these 20 years.

A man with such a family can't be all bad — that is why the Maui County Medical Society has adopted the following:

Declaration

The physicians of Maui County recognize and honor Kenneth A. Haling MD for his many years of community and medical service to the people of Maui.

Dr. Haling has been Maui's Coroner's Physician for almost 20 years. During these years he has continued his medical education because he cares. For the past 10 years he has worked long and hard at the Maui Correctional Center.

The physicians of Maui express their gratitude and thanks to Kenneth A. Haling MD for a job well done. He who follows him as County of Maui Coroner can only do his best; he cannot fill Dr. Haling's shoes.

Because Dr. Haling really believes in a life of duty, it is extremely difficult to obtain information from or about him. He's the kind of doctor who thinks "marketing" means going grocery shopping with his wife. Such a man would, and does, have good friends. Without the help of one Dr. Mahmood Mirzai there would be a paragraph of platitudes.

Ken, to you we send our respect and appreciation!

Helen S. Percy MD

President

Maui County Medical Society

**WOULD
YOU GO
TO YOUR
DOCTOR
FOR
LEGAL
ADVICE?**

GUARANTEED FASTEST PROCESSING AND LOWEST AVAILABLE RATES.

- In-home or office consultation
- Processing of all applications and filings
- Arrangements for appraisal, escrow & other necessary legal matters
- Consultations with your accountants, attorneys or trust officers, if necessary
- Loan officers on call seven days a week

*Let us
Fill in the blanks*

RESIDENTIAL LOAN APPLICATION:

Borrower's Name		Address		City		State		Zip	
Occupation		Employer		Phone		Fax		E-mail	
Marital Status		Date of Birth		Social Security		Credit Score		Loan Amount	
Property Address		Property Value		Purchase Price		Down Payment		Loan-to-Value	
Property Description		Property Age		Property Condition		Property Features		Property Notes	
Property Taxes		Property Insurance		Property Maintenance		Property Repairs		Property Remarks	

The Professionals in Real Estate Financing:

Residential Real Estate
Commercial Real Estate
Jumbo Loans
Conventional Financing
FHA/VA Financing
Second Mortgages



**PHOENIX
FINANCIAL
SERVICES**

1088 Bishop Street
Suite 1215
Honolulu, Hawaii 96813
PH: 538-0088



O.P.T.I.O.N. Care of Hawaii
A Home IV and Nutritional Service

HAVE CONFIDENCE IN INTRAVENOUS HOME CARE

Adopting the highest standards of the profession, our I.V. team consists of specially trained clinical pharmacists and experienced R.N. I.V. therapists working together around the clock to provide the very best in I.V. home care.

**INSIST ON THE BEST!
INSIST ON O.P.T.I.O.N. CARE!**

WE HAVE THE SOLUTION FOR YOU®

For More Information **CALL 254-5841**

Pali Palms Plaza 970 N. Kalaheo Ave. Suite C-106 Kailua, Hawaii 96734

NEWS & NOTES

(Continued from page 448)

pushed the last button "TR" . . . There was excruciating pain and he promptly passed out . . . Next thing he knew, he woke up in the hospital and he could feel a nagging pain . . . the friendly bar-tender was there . . . Charlie asked, "Just what did "TR" stand for . . ." The bar-tender smiled sympathetically, "It stands for 'tampax remover!' . . . The Doc says he left the specimen under your pillow. . . ." (As told by our tennis pro friend, Clay Benham. . .)

Ancient Chinese proverb say: "Do not remove a fly from friend's head with a hatchet."

Conference Humor . . .

Visiting professor, Sharad Deodhar from Cleveland Clinic, lectured on "Laboratory Testing for Autoimmune Disease" on Sept. 18 at Mable Smyth Auditorium . . . Sharad related the following anecdote to emphasize the importance of using correct terminology otherwise "we may use big words in the wrong context: "Two college buddies met for the first time in 20 years . . . 'Say, did you ever marry that gorgeous chick you were dating?' 'Yeah, we've been married 18 years . . . 'Any kids?' 'Not yet.' 'Why not?' 'Well, it's my wife . . . She's *inconceivable* . . . 'Oh?' 'No . . . That's not what I mean . . . Its still my wife . . . She's *impregnable* . . . 'No, what I

"I just put more time in my day."

"If you're like me, time is your most precious commodity. And you probably spend 110% of it trying to be in three places at once."

"With a Honolulu Cellular Telephone, I can take the features and convenience of an office phone, wherever I go. For a lot less than you might think."

"Now I can organize all my activities while I'm on the road. Talk with the press. Coordinate meetings. Even put together a bed race. And have more time to go the extra mile."

CAROLE KAI, Founder,
The Carole Kai International Bed Race

**Honolulu Cellular
Telephone Company**

Hawaii's choice for quality cellular service
1161 Kapiolani Boulevard, Honolulu, Hawaii 96814 545-4765

ERICSSON

FLEXIBLE & DEPENDABLE



The Doctor's Stethoscope. Probably the most flexible and dependable instrument you currently own. Like the stethoscope, your computer system should also be both flexible and dependable. When you choose a computer system from **CompuPro**, that's exactly what you get.

Flexible

A computer must be flexible to be effective. Flexible enough to grow as your practice grows. Flexible enough to choose the medical office management software that best suits your practice. Flexible enough to change as technology changes, so your investment is protected. Flexible enough to offer the performance you need at a price you can afford. Flexible enough to accommodate from 4 to 14 users.

Flexible enough to expand through networking. Flexible enough to incorporate your existing PCs. Flexible enough to offer you all this, and more.

Choose a multi-user system from CompuPro and rest assured that you won't ever be locked in by software or technology.

Dependable

A computer system must also be dependable to be effective. **CompuPro** multi-user systems enjoy an enviable reputation for being the most dependable systems you can buy. They just keep right on working, and that lets you keep right on working. Your computer system should help you with your patients, not become one itself! A dependable system doesn't end with rock-solid hardware. There must be a rock-solid organization behind it with a continuing commitment to quality. One that will be there tomorrow. **CompuPro** has been in business since 1973 and has delivered thousands of multi-user systems, most of which are still in constant use today. And in the unlikely event you'll ever need it, prompt on-site service is available nationwide through **Sperry (UNISYS) CUSTOMCARESM**.

Choose a multi-user system from CompuPro and rest assured that your system and your practice will keep right on running smoothly, year after year after year.

CompuProTM



MICRODYNE
COMPUTER SYSTEMS, INC.

524-1740

677 Ala Moana Blvd., Suite 411
Honolulu, HI 96813

STAT!

When you need to get the call :

Rx Panasonic
EB-362

\$1395

Complete with :

- Battery
- Desktop Charger
- Shoulder Strap
- Antenna
- Carrying Case
- 12V Connect Cable
- 3-Year Warranty



IN TOUCH
Communications
395-4433

GTE

Authorized Agent.

Mobilnet®

Cellular Communications

mean is she's *insurmountable*. 'No! No! She's simply *inscrutable*!' "

Re: Systemic LE: "It's a multiple system disease with varied manifestations . . . It's the great imitator of our times . . . Just as syphilis was formerly the great imitator."

Re: Quality fluorescent slides: His colleague Robert Nakamura says, "The secret to good slides is to make many slides and keep only the good ones. . . ."

Re: Dx of SLE: "LE cell tests are out . . . The test is too subjective and lacks specificity . . . The ARA criteria are lab-oriented i.e. tests for nuclear antigens . . . viz: DNA; DNA-Histone; Sm (nuclear proteins)."

Council Capers August 1987

Frustrating can be the word that sometimes describes how difficult it can be for a Neighbor Island HMA member to attend an HMA committee or council meeting in Honolulu.

Even after trying to book a hotel room two to three weeks before the Aug. 7, 1987, council meeting, the largest hotel (Ala Moana) was completely booked. So, after much haggling, I was able to get a room at a comparable hotel through a former patient of mine in Honolulu.

The meeting started promptly after a delicious Korean dinner buffet. Our efficient HMA president, Dr. Walter Chang, conducted a concise and productive meeting.

It was reported that our present total HMA membership as of July 1987 is over 1,000 (1,003 to be exact), up from last year's 957.

Included in the financial report were:

- The employee's pension plan, which showed an 11% advance for the year.
- The tenant's improvement budget, which won approval for an increase from \$190,000 to \$400,000.
- The HMA's financial condition, which generally continues to be under good control.

☆☆☆

Chop Suey: Right now you would not even recognize your HMA building at 320 Ward Ave. The new owners are renovating the building almost completely.

Tip of the Month: In Honolulu, the best new Italian restaurant is Stromboli's and our's on Maui is Mr. Z's Ristorante.

Denis J. Fu MD
Councillor
Maui County Medical Society

Professional Buyer's Guide

HEALTH CARE & ORTHOPEDIC PRODUCTS

- Cervical Collars
- Abdominal / Rib Binders
- Orthopedic Supports / Lumbar Sacral, & Orthocast
- Extremity Braces Supports
- Sleep Pillows
- Wedge Recliner Pillows
- Posture Backrest
- Contourpedic Cushions
- Medical Massage Vibrators
- Cervical Traction Pillows
- Children's Furniture
- Executive, Secretarial & Lounge Furniture
- EZ Sleep Mattress / Pillows
- Adjusting - Therapy - Examination Tables

*Charge It: Use Your Credit Card
To Order Call TOLL-FREE
1-800-321-6870 (national)
1-800-238-7698 (in Ohio)



Posture Support Mfg., Inc.
P.O. Box 39370
Solon, Ohio 44139

*When ordering ask for literature and price list

AIM HIGH

YOU CAN KEEP THEM IN BALANCE—YOUR FAMILY LIFE AND YOUR MEDICAL PRACTICE.

We'd like to help you spend more time with your family yet receive professional satisfaction from your medical practice. As a member of the Air Force health care team, you'll be able to participate in our group practice concept which will free you of most administrative duties. Air Force benefits are also very attractive. You and your family will enjoy 30 days of vacation with pay each year plus many more Air Force advantages. Call

Capt. Meyers
(206) 526-3054
Collect



**Yours,
Very
Truly**



Medical Insurance Exchange of California

Professional Liability Insurance Exclusively.

Sponsored by Hawaii Medical Association.

6250 Claremont Avenue, Oakland, California 94618-1324

Telephone toll-free, (800) 227-4527, or call Hawaii Medical Society, (808) 536-7702



YES TO ALL THINGS
THAT MAKE HAWAII SPECIAL.

 **FIRST HAWAIIAN BANK**
We say yes to you. Member FDIC

DECEMBER 1987
VOL. 46, NO. 12

Hawaii MEDICAL JOURNAL

CONTENTS

EDITORIALS:	458
Sudden Death	
J.I. Frederick Reppun, MD	
The Family Physician	
J.I. Frederick Reppun, MD	
LETTERS TO THE EDITOR	460
Re: Editorial on "A Personal Account"	
Re: Article on Premies	
THIAZIDE-INDUCED THROMBOCYTOPENIA:	463
A CASE REPORT	
Sukchai Satta, MD	
AORTIC VALVULOPLASTY: A CASE REPORT	464
David J.G. Fergusson, MD	
Raymond K. Itagaki, MD	
PREVALENCE OF SMOKING AT A LARGE SUGAR CANE	468
PLANTATION IN HAWAII	
Susan M. Coughlin, DO	
THE ROLE OF CALCIUM CHANNEL BLOCKERS IN	473
THE MANAGEMENT OF CEREBRAL ISCHEMIA	
M. Kathryn Schaefer, MD	
Ronald Frederick Schaefer, MD	
BOOK REVIEW	479
Krishna Kumar, MD	
MY MANA'O	481
What of the HMA's 131st?	
J.I. Frederick Reppun, MD	
CLINICAL PATHOLOGIST'S EASY CHAIR	485
Francis H. Fukunaga, MD	
NEWS & NOTES	487
Henry Yokoyama, MD	



HAWAII MEDICAL ASSOCIATION
JULY 1988
SOME WORDS HAVE BEEN CHANGED

If your patient needs surgery, consider the outpatient alternative.

Your patients aren't the only ones who benefit from ambulatory surgery.

You too can enjoy the convenience of easy scheduling and less administrative red tape when you perform elective procedures in an outpatient setting.

When you choose a lower cost setting for ambulatory surgery, your surgical reimbursement remains unaffected while you help your patient avoid unnecessary hospital bills. Also, by saving hospital beds for patients who really need them, health care costs are contained for everyone.

HMSA guarantees maximum health plan coverage for outpatient services at participating surgery centers and in your own office.

Call HMSA's Professional Relations staff for more information on outpatient surgery.



HMSA Professional Relations Department

Oahu:	944-2300
Maui:	871-6295
Kauai:	245-3393
Hawaii:	935-5441 (Hilo) 329-5291 (Kailua-Kona)

**HMSA's Place of Treatment Program
saves your patients money.
Call us for details.**

HAWAII MEDICAL JOURNAL

(USPS 237-640)

Published Monthly for the

HAWAII MEDICAL ASSOCIATION
(Incorporated in 1856 under the Monarchy)

320 Ward Avenue, Honolulu, Hawaii 96814
Ph. (808) 536-7702

EDITORS

Editor: J.I. FREDERICK REPPUN, MD

Founding Editor: HARRY L. ARNOLD JR., MD

News Editor: HENRY N. YOKOYAMA, MD

Assistant Editor and Book Review Editor:

DOUGLAS G. MASSEY, MD

Contributing Editors: STEPHEN R.P.K. BRADY, MD,

FRANCIS H. FUKUNAGA, MD,

Managing Editor: CHARLES ROGERS

Editorial Assistants: BECKY KENDRO

NATALIE PERKET

Copy Editor: GWENDOLYN CHANG HULLEMAN

Graphic Artist: J. CHARLES DAVIS

Publisher: STEPHEN S. LENT

Editorial Board

NORMAN GOLDSTEIN, MD,

THOMAS C. HALL, MD, ROBERT T.S. JIM, MD,

JAMES LUMENG, MD, FRANCIS D. PIEN, MD

Publications Committee: CHARLOTTE M. FLORINE, MD

(Commissioner)

HENRY N. YOKOYAMA, MD

(Chairman)

STEPHEN R.P.K. BRADY, MD,

NATHANIEL P.H. CHING, MD,

FRANCIS H. FUKUNAGA, MD, CHARLES JUDD, MD,

JAMES LUMENG, MD, DOUGLAS G. MASSEY, MD,

JAMES P. MCGUIRE, MD,

DAMKERNG PATHOMVANICH, MD,

ROBERT HOLLISON, MD, BAL RAJ MEHTA, MD,

J.I. FREDERICK REPPUN, MD,

TERRY C.Y. WONG, MD,

SUSAN IRVINE (HMA Auxiliary)

OFFICERS

President: WALTER W.Y. CHANG, MD

President-Elect: JAMES LUMENG, MD

Past President: RUSSELL T. STODD, MD

Secretary: JOHN H.C. KIM, MD

Treasurer: ALLAN R. KUNIMOTO, MD

County Presidents

Hawaii: CRAIG KADOOKA, MD

Honolulu: JOHN T. McDONNELL, MD

Kauai: THOMAS GROLLMAN, MD

Maui: HELEN S. PERCY, MD

West Hawaii: KENNETH E. GRANT, MD

Delegates to AMA

WILLIAM E. IACONETTI, MD

CALVIN C.M. KAM, MD

Alternate Delegates to AMA

WALTER W.Y. CHANG, MD

RUSSELL T. STODD, MD

Advertising Representatives

CROSSROADS PRESS, INC.

Post Office Box 833

Honolulu, Hawaii 96808

Phone (808) 521-0021

Pharmaceutical Advertising

UNITED MEDIA ASSOCIATES, INC.

16 Bruce Park Avenue

Greenwich, Connecticut 06830

Phone (203) 661-9702

THE JOURNAL cannot be held responsible for opinions expressed in papers, discussions, communications, or advertisements. The advertising policy of the HAWAII MEDICAL JOURNAL is governed by the rules of the Council on Drugs of the American Medical Association. The right is reserved to reject material submitted for editorial or advertising columns. The HAWAII MEDICAL JOURNAL (USPS 237-640) is published monthly by Crossroads Press, Inc., for the Hawaii Medical Association, 320 Ward Avenue, Honolulu, Hawaii 96814. Second-class postage paid at Honolulu, Hawaii. Non-member subscriptions are \$15. POSTMASTER: Send address changes to the HAWAII MEDICAL JOURNAL, 320 Ward Avenue, Honolulu, Hawaii 96814. Copyright 1986 by the Hawaii Medical Association. Printed in U.S.A.



"The hottest new entry in the field of four-wheel drives!"

AUTOMOTIVE EXECUTIVE
March 1987

FOR A CHANGE OF PACE... ...SUZUKI SAMURAI

For a change of pace . . . the SUZUKI SAMURAI!! It's the first "mini" four-wheel drive that gives you everything you ever wanted in a vehicle. The toughness of a truck, with the comforts of a car and the promise of something new and exciting. Even more exciting is the SAMURAI's lofty EPA gas mileage rating of 27 MPG city and 29 MPG highway*. The SAMURAI's 5-speed manual transmission is no wimp either, as it packs plenty of sheer fun and excitement into your life! So, join the fun and experience what the SUZUKI SAMURAI 4x4 is all about!

FUEL ECONOMY	
City*	27mpg
Highway*	29 mpg

"If you're not having fun yet, you haven't discovered the SAMURAI." POPULAR MECHANICS
February 1987

For fun, excitement and a change of pace experience the SAMURAI!!

**SUZUKI...
It's 4U2!!**

*1986 EPA Estimates. Use these estimates for comparison. Actual mileage may vary depending upon trip length, speed and weather. Actual highway mileage will probably be less.

VISIT YOUR NEAREST DEALER TODAY!!

• **KAILUA TOYOTA**
Kailua Ph. 261-3321

• **WAIPAHU TOYOTA**
Waipahu Ph. 677-3161

• **MOTOR IMPORTS**
650 Kapiolani Ph. 526-2688

• **KAUAI TOYOTA**
Lihue Ph. 245-6978

• **KAIMUKI TOYOTA**
Kaimuki Ph. 735-1737

• **WAIHAWA TOYOTA**
Wahiawa Ph. 622-4195

• **WINDWARD TOYOTA**
Kaneohe Ph. 235-0068

• **TOYOTA CITY**
Moanalua Gardens
Ph. 834-1402

DIVISIONS OF SERVCOR PACIFIC INC.





Sudden Death

It seems strange to be reading a piece on human medicine in a magazine devoted to nature. On second thought, however, *Natural History* is a magazine that covers all of nature, and despite his affinity to despoil it, man is a part of planet earth's plant and animal kingdom.

The October 1987 issue juxtaposes the article "Sudden Refugee Death" on the same Postscripts page as "Return of the Western Wolf." Is there something appropriate about that?

Apparent, but unconfirmed by autopsy, cardiac arrest has taken the lives of a hundred — mostly young men from Southeast Asia — refugees recently settled in the U.S. Why does this happen in their sleep and why mostly to the ones most recently arrived in this country?

Medical epidemiologist Gib Parrish of the CDC in Atlanta has tabulated a yearly decline in such deaths, following a peak period in 1980-1982. He postulates that this decline is commensurate with the decline in immigration of such peoples (the total refugee population in the U.S. is around 800,000). Is it due to stress? Resettlement? A transitional diet, or prior malnutrition?

A similar experience has been documented in the Thai refugee camps and among the refugees in the Philippines and Japan.

Pathological studies of the conduction systems in autopsied hearts have proven to be inconclusive as to findings. Those people who have been successfully resuscitated show no evidence of disease afterward.

Robert H. Kirschner of the Cook County Medical Examiner's Office is quoted as believing the triggering mechanism for arrhythmias might be a nightmare.

Michael A. Brodsky, director of the University of California Irvine's Cardiac Arrhythmia Service, apparently sees a great many of these people, men and women with arrhythmias, a significant number of whom have "normal hearts." Brodsky proposes that this class of refugees be examined carefully and perhaps be given Beta-blockers prophylactically "to block the sympathetic branch of the autonomic nervous system, whose arousal is associated with psychological stress."

Parapsychology, anyone? Or is the Kahuna ana'ana about?

J.I. Frederick Reppun MD
Editor

The Family Physician

There is such a thing as a certified specialty under the American Board of Family Practice. There is also an organization of physicians that claims, and rightfully so, the title of American Academy of Family Physicians. The latter includes as members the traditional, ancient, and honorable general practitioner, the country doctor who makes house calls, also known as "the family doctor." He managed and cared for the medical needs of people from prebirth to the exit from life. The former, whose members are certified as "Family Physicians," requires them to take entrance examinations and then re-examinations more stringent than what many other specialties undergo.

This does not mean that FPs have sole jurisdiction over the whole patient, as opposed to just one or two of the patient's various organ systems. "Holistic" medicine should be a large part of the practice of all physicians who proudly display the suffixes of MD or DO on their shingles.

Historically, in 1969 the ABFP grew out of a need for generalists/family physicians to be recognized, primarily in hospitals, on a par with the growing number of specialists and sub-specialists who were invading the turf of the general practitioner and crowding him out from being "privileged" to do anything and everything (the license to practice medicine granted by the State does not, of itself, restrict what any MD or DO can do!).

In the process of developing this new "specialty," it was obvious that specialized training had to be structured. No longer would it be allowed for a graduate to get by with only one year of a rotating internship. After a long period of "grandfathering," both the AAFP and the ABFP now require extensive residency training before a physician can apply for membership, or apply for certification, respectively.

In theory, that was all well and good; standards of practice by family physicians, nee general practitioners, would be revised upward.

However, in fact, it didn't quite work out that way. Those who are now certified as "Family Physicians" are more likely not to be delivering babies; they are permitted to follow only normal healthy babies in the hospital nursery, and they are

(Continued on page 460)



Too often
corporations

go where destiny takes them.
Without reason, purpose or
agenda. And too often they
fail. At HEI, we've built a
corporation of strong, diverse
companies; 2400 men and
women with a single purpose.

*We deliver quality services,
essential to the lives of
our customers.*

ELECTRIC ENERGY:

Hawaiian Electric Co.,

Maui Electric Co., Hawaii

Electric Light Co., Hawaiian

Electric Renewable Systems

TRANSPORTATION:

Hawaiian Tug & Barge,

Young Brothers

REAL ESTATE:

Malama Pacific Corp.

FINANCIAL SERVICES:

Hawaiian Insurance Group,

HEI Investment Corp.

We deliver quality
services, essential to the lives
of our customers.

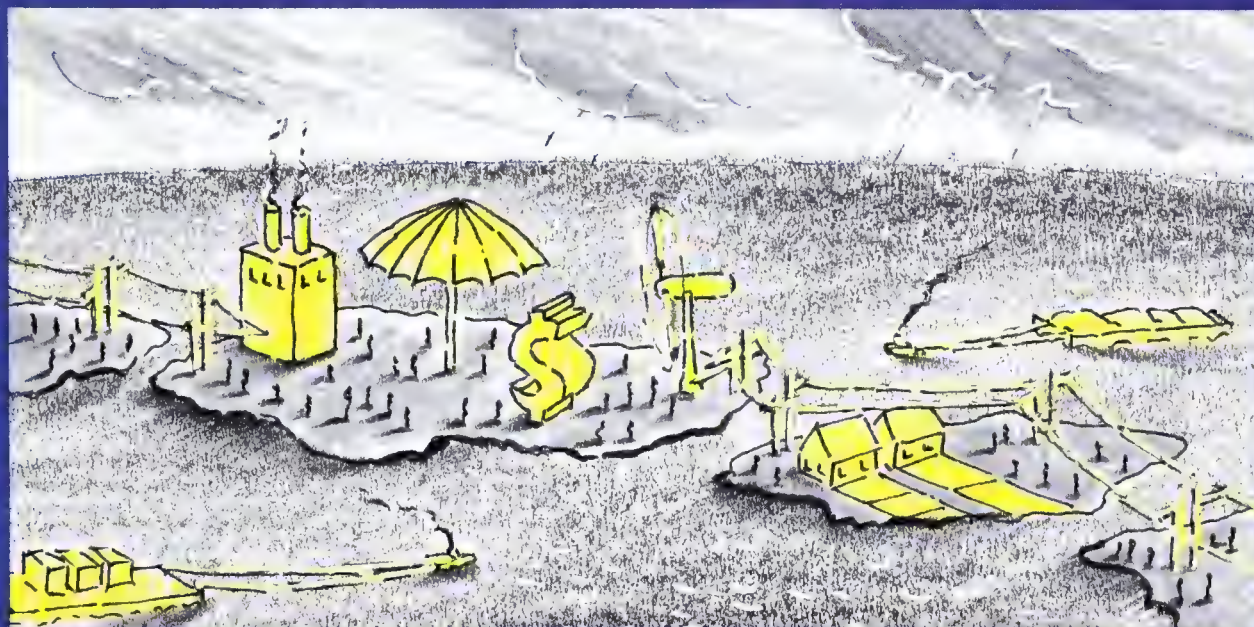
We are Hawaii-based,
involved in electric energy,
transportation, financial
services and real estate. HEI
works in the free economy, in

the government regulated
private sector and in
cooperative efforts between
business and government.

To talk about one's
destiny is a simple thing. But
at HEI we are serious about
the companies we operate

and how we define success.
Across the board, HEI
companies will continue
to make significant
contributions to the growth
of our island economy and
enhancement of our quality
of life.

HEI. ESSENTIAL BUSINESSES FOR A COMPLEX WORLD.



EDITORIALS

(Continued from page 458)

almost never privileged to do major surgery. They have become internists who do not limit their practices to adults only.

For one thing, training under the FP residency programs has been restricted; the surgical and obstetrical specialists have not wanted to relinquish their turf. A "taste" of the specialty qualifies no one to claim to be a surgeon or an obstetrician, although it does expose the neophyte to what's what in the field.

If, in order to be able to become proficient with an appendectomy you were required to be able to do a hemicolectomy equally well, then you might as well go all the way and become the specialist (training for five to seven years)!

Medical school faculties rarely include specialists in family practice in their rosters (ours does not). Is it any wonder that students who really *want* to be "family physicians" are largely discouraged from doing so?

The result is that FPs are actually on a par with internists, who also don't deliver babies, do no major surgery but can do office minor surgery as well as any FP. FPs are even classified on a level *below* internists, unless they go in for specialized training to be able to do cardiac cath, needle biopsies, chest tube insertions, paracenteses, endoscopies, etc. (It is rather astounding to see these "medical specialists" do so much "surgery"! So it is if the FP wants to have privileges to care for his or her patient in the Coronary Care Unit.

FPs differ in hospital privileges from pediatricians in that the FP is precluded from caring for the high-risk newborn and the critically-ill child. The pediatrician is the primary caregiver for a restricted age group, usually from birth to age 19, but it is obvious that in caring for a child one must also deal with the parents or other adult guardians. What pediatrician would refuse to treat the mother's pharyngitis at the same time her

child is suffering from the same disease? The FP can claim to be the family doctor only in that he is certified to treat the ailing adult as well as the child, but both must deal with the family.

A *good* surgeon can and may do general practice; a generalist or a family physician *may not* do surgery any longer — except if he or she be situated way out in the sticks, where no specialist would deign to practice or care less about what goes on out there in a small hospital.

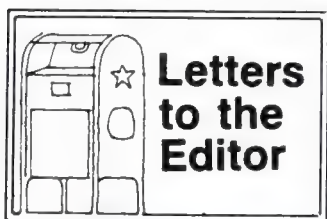
The "specialty" of Family Practice must recognize that it does not hold exclusive rights to care for the whole family. The family, or any member thereof, or any individual, has the inalienable right to choose any doctor who will take the case. Families cannot be forced to go to family physicians for health care; we do not — as yet — have a gatekeeper system in our society (although the political pressures in that direction are mounting, e.g. in HMOs).

Thus it should be understood that every physician should never refuse to be the portal of entry into our sophisticated and superb American brand of medical care. Referral should be — and is for the most part — the easiest thing in the world to do. Access to the most pertinent and the best of care needed by that patient should always be available to him or her.

The specialist whose field is exclusively the left nostril has as much of an obligation to care for the whole patient as does the generalist confronted by the same patient with a pain in the left naris. Both physicians should realize that it is good medical practice to learn about the whole patient, about the relatives, about the home, the job, and the community in which the patient resides. "No man is an island unto himself."

"The Caring Physician," as a logo, should apply equally to all physicians and not only to those who claim to be family physicians.

J.I. Frederick Reppun MD
Editor



Re: Editorial on "A Personal Account"

Funny how childhood accidents stick in the memory! I have a sickle-shaped scar on the flexure of my right wrist from putting my hand through the glass pane in a door in old Bishop Hall at Punahou to push it out of my way while I was running in a classroom, and a diagonal scar across the ball of my right thumb from grabbing the splayed top of an iron post to steady my little rowboat, off Fort DeRussy, when a wave washed the boat against my thumb. I had iodine poured onto *that*, too, by my mother, when I got home!

I enjoyed the April issue very much; glad to see you added a new contributing editor, and (surprise!) a new managing editor, too! But you still need an editorial proofreader. In that reminiscent editorial, I noted the attribution of *Aequanimitas* to O.W. Holmes (it was Osler!), and tachypnoea for tachypnea, acetaminaphen for acetaminophen, casts for castes, ememata for enemata, or enemas, and phenargan for Phenergan. I chuckled at your praise of nurses for things they scorn to do in

today's world — straightening sheets, rubbing backs, hands-on TLC, et cetera!

Those were nice pieces on Bob Millard. Loveable guy! R.I.P.!

Harry L. Arnold Jr., MD

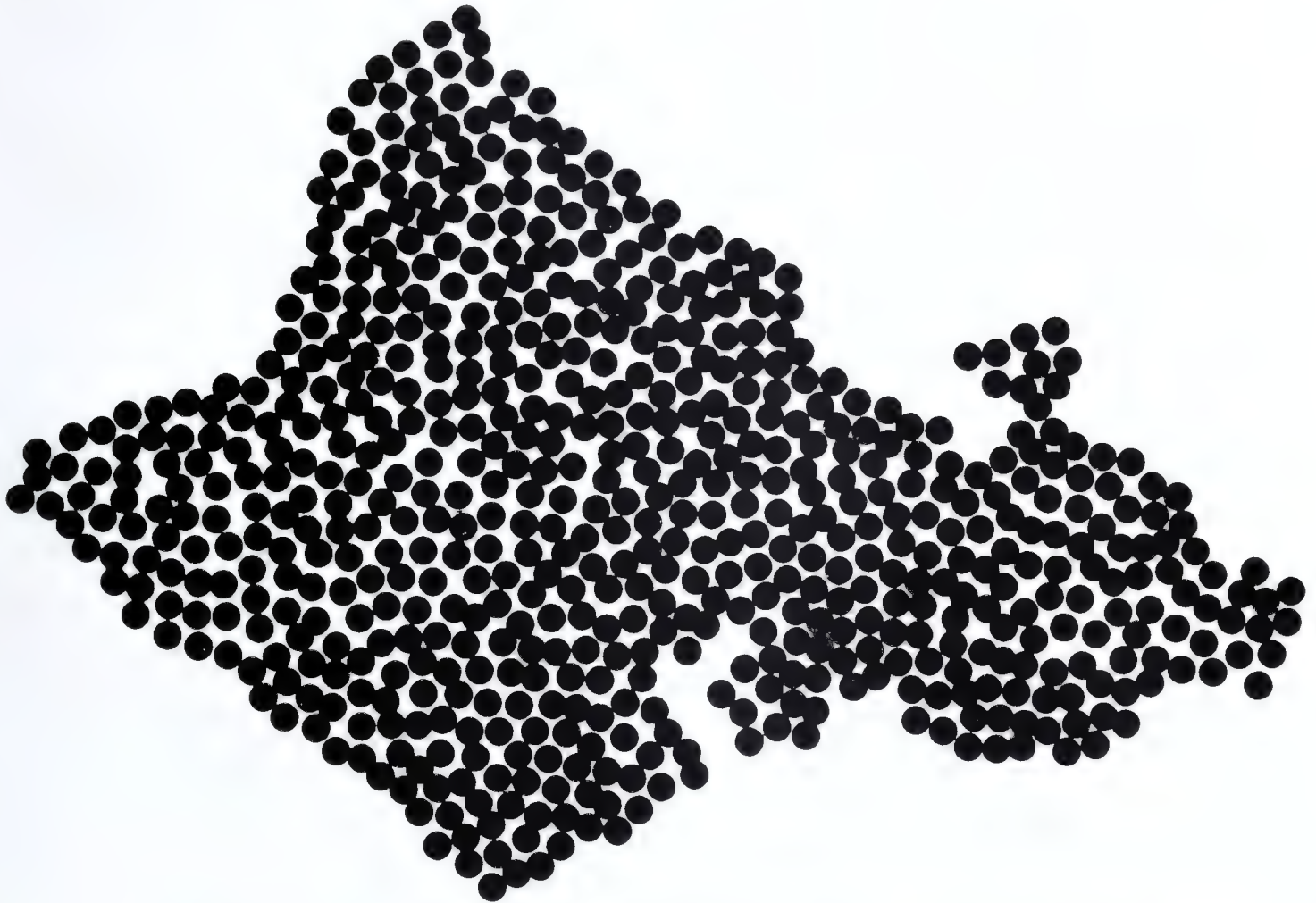
Mea culpa! But . . . we could blame the word processor for some errors sometimes.

—Editor

Re: Article on Premies

Thank you so much once again for publishing my article and for your nice comments in the editorial. I am sure you are aware that my project was only a very small sidebar to extensive work conducted at the Kapiolani Medical Center for Women & Children by the Neonatal Follow-up project for many years now. This project was originally under the direction of Bob Anderson, MD, and is currently headed by Sherry Loo, MD. They offer not only evaluation of small premature infants for scientific purposes but also provide very useful feedback to parents on how their babies are doing. Thus, they are often able to facilitate early intervention in problems that become apparent after the babies leave the hospital. Thank you once again for your kindness to me.

Mary S. Sheridan, PhD, ACSW
Home Monitor Coordinator, KMCWC



Only Hawaiian Tel's pager network can reach you at all these points.

We'll get right to the point.

Hawaiian Tel offers the only pager network that provides Island-wide and state-wide coverage.

So you're in touch from Waimea to Waimanalo. Makaha to Makapuu. Haleiwa to Honolulu. And all points in between.

We also offer extensive Neighbor Island and interisland service. Comprehensive warranties on every pager we rent or sell (both tone and digital readout models). Plus, our monthly network service fee works out to less than a dollar a day. That's a small price to pay for constant contact with your business.

To take advantage of all our good points, call 732-9500 on Oahu or 1-800-232-8822 on the Neighbor Islands.

HAWAIIAN TEL GTE

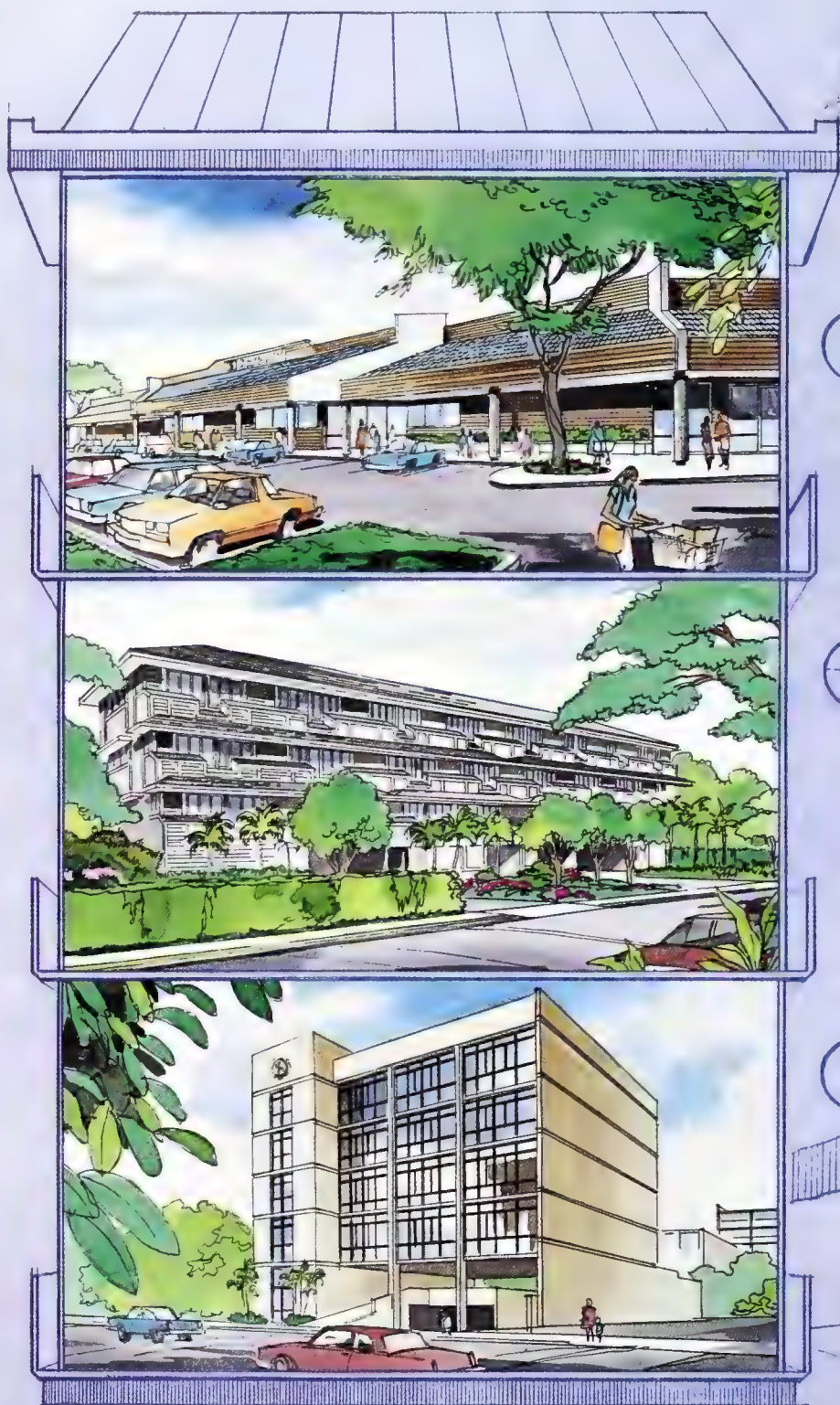
Beyond the call

SUCCESS STORIES

Every commercial project has a different story. There are 50-story towers. And 1-story office buildings.

But when it comes to financing, some things remain constant. Like First Interstate Bank. You can always count on us for personal service. Flexible terms. Competitive rates. Quick approvals. And, we can draw on the strength of First Interstate Bancorp.

For more information, call Robert Okubo at 525-7837, or Jim Wayman at 525-7815. In the meantime, take a look at a few of our success stories.



1

2

3

 **First
Interstate
Bank**

1. Windward Town & Country Plaza Shopping Center, with 55,000 square feet of leaseable area. The project has been appraised for \$8,135,000.

2. The Residence at Punahou, a condominium project consisting of 19 two-bedroom and 4 one-bedroom units. The project has been appraised at \$2,432,000.

3. Hawaii Medical Association Building, a 22,400 square foot, four-story office building. The property has been appraised at \$3,260,000.



Thiazide-Induced Thrombocytopenia: A Case Report

Sukchai Satta MD*

The frequency of thrombocytopenia after treatment with thiazides and other modern diuretics given orally is demonstrated by the fact that these drugs accounted for more than 40%, or 52 out of 126 cases, of drug-induced thrombocytopenia reported in a study from the Swedish Adverse Drug Reaction Committee¹.

Introduction

Thiazides are commonly used in patients with hypertension. Thrombocytopenia after treatment with thiazides is probably the result of a toxic effect on the bone marrow, causing a decrease in platelet production².

Thiazide-induced thrombocytopenia only infrequently causes an increased bleeding tendency. Prognosis is good, with a rapid return to a normal platelet count when the drug is discontinued. Thrombocytopenia is slow to develop, the degree moderate and the course not at all as drastic as in thrombocytopenia secondary to immunological mechanisms.

The causative relationship between thrombocytopenia and thiazides is demonstrated when normal platelet counts are obtained when the drug is discontinued. The depression of the platelets is usually moderate and only infrequently is it severe enough to cause purpura.

This might explain why hitherto not much emphasis has been ascribed to this possible side effect of the very commonly prescribed drugs. The following is a case report of a very unusual, severe thrombocytopenia with upper gastrointestinal bleeding, induced by thiazide.

Case Report

A 76-year-old Japanese woman was admitted to hospital due to hematemesis. The patient was on NPH U-100, 25 units every morning for diabetes mellitus and she had been taking Esidrix (Hydrochlorothiazide) 50 mg once a day for five years. About four months prior to admission, the Esidrix had been changed to Moduretic once a day. (Moduretic is an amiloride hydrochloride HCL with Hydrochlorothiazide.) Also, K-Lyte one tablet three times a day was added because of her hypokalemia.

The patient woke up about 5 o'clock in the morning because of a queazy feeling in the stomach and vomited bright red blood. The patient denied taking aspirin; denied drinking alcohol or smoking.

The hemoglobin dropped from 11.6 gms to 9.9 and then to 8.8. She was also hypotensive. The platelet count was below 5,000 on admission.

Hospital Course

The Moduretic and K-Lyte were discontinued. Fluid replacement was given; six units of platelets were given by transfusion as well as two units of packed red blood cells. Cimetidine intravenously plus antacid via nasogastric tube were given. The platelet count rose from 5,000 to 84,000, down to 68,000, then up again to 80,000. Endoscopic examination revealed a hemorrhagic gastritis of the antrum and the body of the stomach. Bone marrow biopsy showed left shift granulocyte series, adequate megakaryocytes, absence of iron stores and that the bone marrow was probably in the recovery stage.

The patient was subsequently put on a bland diet, antacids and Cimetidine taken orally and continued to do well. She was later put back on her insulin and her diabetic diet. On a follow-up one month later, the patient was feeling well and doing well. CBC at that time: hemoglobin 13.8 grams, hematocrit 40.2, platelet count 450,000. On a follow-up two years later, the patient was doing well on medication for diabetes and hypertension with hypertensive heart disease.

Discussion

The case is one of upper gastrointestinal bleeding resulting from thrombocytopenia probably secondary to Hydrochlorothiazide. The patient was on K-Lyte; this could have caused gastrointestinal irritation, resulting in nausea and vomiting. The rise in platelets post-platelet transfusion suggests that this process is not antibody-mediated. The continued rise in platelet count and the presence of adequate megakaryocytes suggests that the cause of the thrombocytopenia had been removed.

The mechanism of the process was probably suppression of the platelet production by the diuretic hydrochlorothiazide.

REFERENCES

1. Bottiger LE and Westerholm B: Thrombocytopenia. Drug-induced Thrombocytopenia, *Acta Med Scand* 191:541-548, 1972.
2. Miescher PA: Drug-Induced Thrombocytopenia, *Seminematol* 10:311-326, 1973.

Accepted for Publication August 1987

*Kona Hospital
P.O. Box 69
Kealahakua, Hawaii 96750

Aortic Valvuloplasty: A Case Report

David JG Fergusson MD*
Raymond K Itagaki MD*

Balloon dilatation has become well-established as a form of treatment for certain patients with arteriosclerotic heart disease, since it was first performed in 1977. More recently, a similar technique has been employed in the management of severe valvular stenosis. This report describes the use of valvuloplasty in a 72-year-old woman with severe aortic stenosis.

Case Report

The patient had a heart murmur known for approximately 20 years and had been diagnosed as having aortic stenosis for 10 years. She had experienced progressive exertional dyspnea for one year prior to the present.

The murmur was typical of aortic stenosis, grade IV/VI in intensity, radiating into the neck vessels. The apex beat was palpable in the fifth left intercostal space at about the mid-clavicular line, and the cardiac impulse had a left ventricular quality to it. There were no signs of heart failure. The electrocardiogram showed left ventricular hypertrophy with marked ST-T abnormality. The chest X-ray demonstrated mild cardiomegaly.

The patient underwent left heart catheterization with angiography in December 1986; this revealed severe calcific aortic stenosis with minimal aortic insufficiency. There was a peak-to-peak gradient of 100 mm at the aortic valve. The aortic valve area was calculated to be 0.6 cm². Left ventricular systolic function was mildly impaired with an ejection fraction of 48%. Marked left ventricular hypertrophy was seen. Coronary arteriography showed moderate narrowing in the right and anterior descending coronary arteries but no severe stenotic lesions.

She was advised to undergo aortic valve replacement, but refused. She did, however, subsequently agree to aortic valvuloplasty and this was performed on June 30, 1987. This was carried out without complications and the patient was discharged three days later in satisfactory condition and fully ambulatory. She walked up two flights of stairs in the hospital on the day before discharge, without dyspnea, a considerably greater degree of exertion than she could tolerate previously. Since discharge, she has remained greatly improved, with only mild shortness of breath on exertion.

Accepted for Publication September 1987

*From the Department of Cardiovascular Disease
Straub Clinic & Hospital
888 S. King St., Honolulu, Hawaii 96813

The Procedure

After premedication with sodium phenobarbital, benadryl, atropine and penicillin, a Swan-Ganz thermodilution catheter was introduced through the left femoral vein in order to obtain pulmonary artery and wedge pressures, and for cardiac output measurement. A sheath was placed in the left femoral artery for arterial pressure measurement. Cut-down was performed on the right femoral artery and an angiographic catheter passed retrograde up to and across the aortic valve into the left ventricle.

Using an exchange guide-wire, the catheter was replaced by a 15 mm and subsequently an 18 mm balloon-dilating catheter. Successive inflations of the balloons showed initial distortion of the inflated balloon by the valve and subsequent loss of this distortion indicating dilatation of the valve. On fluoroscopy a striking improvement in mobility of the calcific valve components was noted. An aortogram following dilatation showed minimal aortic insufficiency, not increased from the time of the previous procedure. Hemodynamic measurements are as noted in Table I.

Discussion

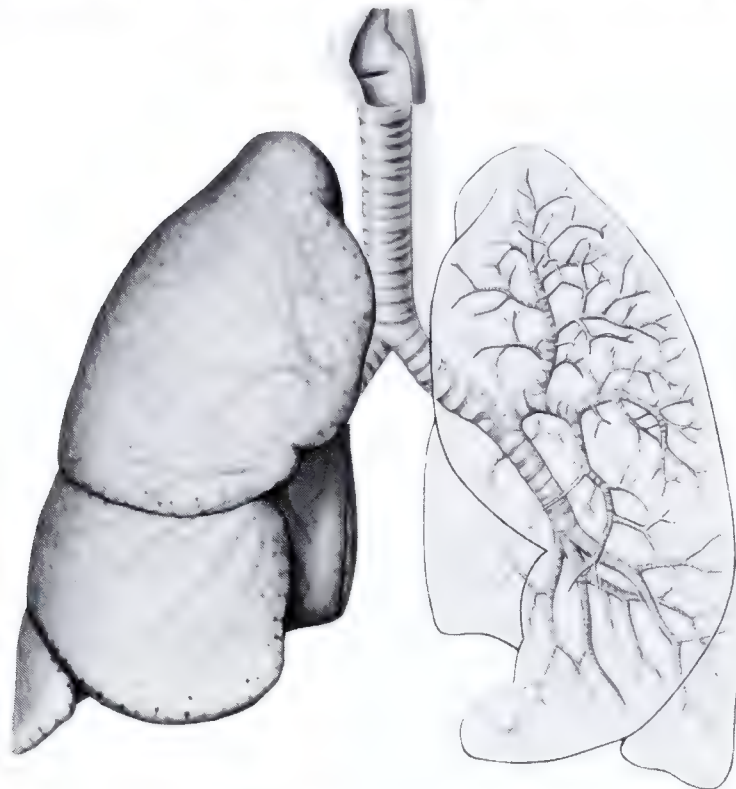
Balloon valvuloplasty was first described for use in congenital pulmonic valve stenosis¹ and later for aortic stenosis in children² and adults³. It has also been used, employing a transseptal technique, for the mitral valve⁴. In first world nations the aortic valve is likely to be the valve most frequently treated by valvuloplasty. Several recent reports reflect increasing use of the procedure for adults with aortic stenosis.^{5,6,7,8}

The mechanism of improvement in stenosis is not fully understood, but probably represents stretching, some degree of commissural splitting, and the break up of calcium in the valve^{6,9}. Surprisingly, in view of the last, embolization is rare. Early clinical results have been encouraging, and dramatic in some

TABLE I
Hemodynamic Findings

	Before Dilatation	After
Dilatation		
Pressures (mm Hg):		
Left ventricle	230/6	178/8
Aorta	110/54	132/56
Systolic gradient (peak to peak)	120	46
Calculated valve area	0.6 cm ²	0.9 cm ²

Consider the causative organisms...



Ceclor[®]
cefactor

250-mg Pulvules[®] t.i.d.
offers effectiveness against
the major causes of bacterial bronchitis

Haemophilus influenzae and *Streptococcus pneumoniae*
(ampicillin-susceptible and ampicillin-resistant)

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor[®] (cefactor)

Summary. Consult the package literature for prescribing information.

Indication: Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β -hemolytic streptococci)

Contraindication:
Known allergy to cephalosporins

Warnings:

CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it
- Prolonged use may result in overgrowth of non-susceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients

Adverse Reactions: (percentage of patients)

- Therapy-related adverse reactions are uncommon. Those reported include
- Gastrointestinal (mostly diarrhea): 2.5%

- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever) 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonía, dizziness, and somnolence have been reported

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis, elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistix[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

PA 0709 AMP

©1987, ELI LILLY AND COMPANY

CR-5005-B-849318



Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

**Strong.
Sensible.
Sound.**



Medical Insurance Exchange of California

Professional Liability Insurance Exclusively.

Sponsored by Hawaii Medical Association.

6250 Claremont Avenue, Oakland, California 94618-1324

Telephone (415) 428-9411, outside California (800) 227-4527

Or call Hawaii Medical Association, 536-7702

And you own it.

individuals. Long-term outcome is not known as yet, but the attempts at open valvotomy prior to the advent of valve replacement did result in frequent re-stenosis.

The procedure must clearly thus be considered palliative at the present time. It should be considered for patients with severe aortic stenosis who are either considered too ill for, or who refuse, aortic valve replacement. The latter, with use of either a mechanical valve, a xenograft, or homograft, remains the standard treatment. Valvuloplasty is attractive in terms of lesser morbidity, lower cost, less disruption of the patient's life and with lower reported mortality. If presently reported results are confirmed, and especially if early clinical and hemodynamic improvement can be sustained, then it may come to play a greater role in the management of severe aortic stenosis.

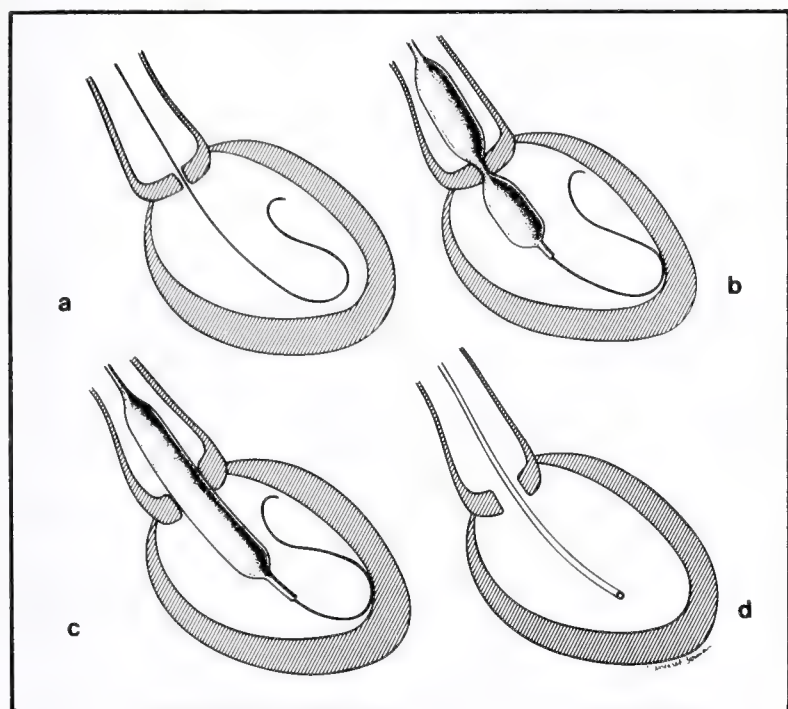


Figure 1—Diagram of Steps In Aortic Valvuloplasty.

- A flexible guidewire is passed across the aortic valve and coiled in the left ventricle.
- The balloon catheter is passed along the guidewire and inflated within the valve, deforming the balloon.
- The valve has widened and the balloon is no longer deformed.
- The valve opening has improved. The balloon catheter and guidewire have been replaced by a catheter to measure final left ventricular pressure.

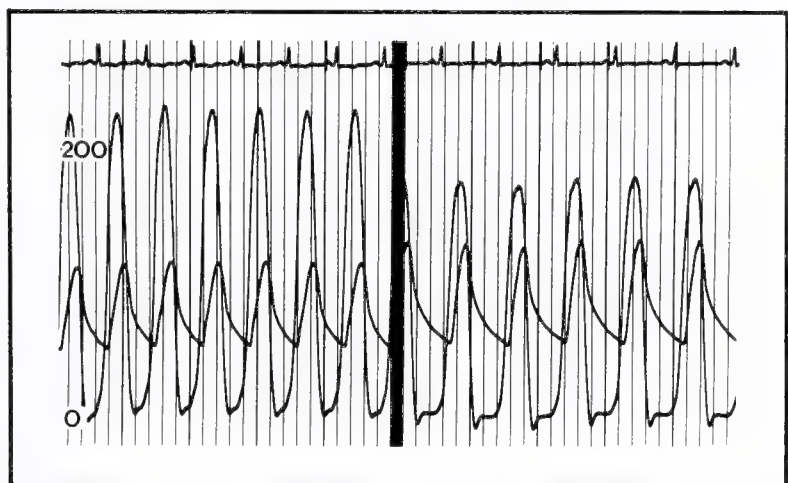


Figure 2—Pressure Recordings. Simultaneous pressure recording from left ventricle and femoral artery before and after valvuloplasty, showing the reduction in valve gradient.

Summary

A patient with severe aortic stenosis who refused aortic valve replacement was treated by valvuloplasty without complication and with a substantial improvement in hemodynamics. This procedure has been successfully used in patients previously too ill to undergo aortic valve replacement or who refuse that operation. Whether the procedure will have a wider role in the management of stenosis will depend on the results of long-term follow-up.

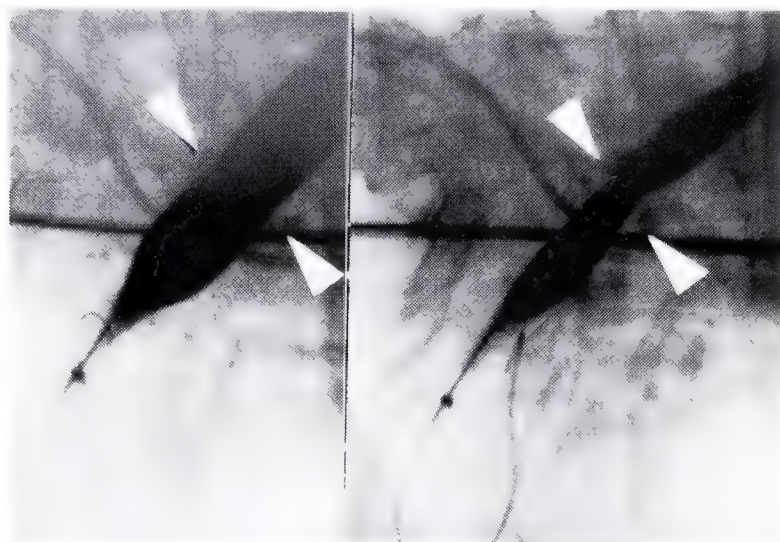


Figure 3—Images Recorded During Balloon Inflation.

- 15 mm balloon during initial inflation showing marked distortion by the stenotic valve.
- 18 mm balloon showing minimal distortion by the now widened valve.

ACKNOWLEDGMENTS

We thank Dr. Dean Nakamura who performed the femoral cut-down and Margaret Berman for the illustration.

REFERENCES

- Kan JS, White RI Jr, Mitchell SE, Gardner TJ: Percutaneous balloon valvuloplasty: A new method for treating congenital pulmonary valve stenosis. *N Engl J Med*: 307(9), 540-2, Aug 26 1982.
- Lababidi Z: Aortic balloon valvuloplasty. *Am Heart J*: 106 (4 pt 1), 751-2, Oct 1983.
- Cribier A, Savin T, Saoudi N, Rocha P, Berland J, Letac B: Percutaneous transluminal valvuloplasty of acquired aortic stenosis in elderly patients: an alternative to valve replacement? *Lancet*: 1 (8472), 63-7, Jan 11 1986.
- Lock JE, Khalilullah M, Shrivastava S, Bahl V, Keane JF: Percutaneous transarterial balloon valvuloplasty for mitral valve stenosis. *N Engl J Med*: 313 (24), 1515-8, Dec 12 1985.
- McKay RG, Safian RD, Lock JE, Diver DJ, Berman AD, Warren SE, Come PC, Baim DS, Mandell VE, Royal HD, et al: Assessment of left ventricular and aortic valve function after aortic balloon valvuloplasty in adult patients with critical aortic stenosis. *Circulation*: 75 (1), 192-203, Jan 1987.
- Cribier A, Savin T, Berland J, Rocha P, Mechmeche R, Saoudi N, Behar P, Letac B: Percutaneous transluminal balloon valvuloplasty of adult aortic stenosis: Report of 92 cases. *J Am Coll Cardiol*: 9 (2), 381-6, Feb 1987.
- Isner JM, Salem DN, Desnoyers MR, Hougen TJ, Mackey WC, Pandian NG, Eischorn EJ, Konstam MA, Levine HJ: Treatment of calcific aortic stenosis by balloon valvuloplasty. *Am J Cardiol*: 59 (4), 313-7, Feb 1 1987.
- Schneider JF, Wilson M, Gallant TE: Percutaneous balloon aortic valvuloplasty for aortic stenosis in elderly patients at high risk for surgery. *Ann Intern Med*: 106 (5), 696-9, May 1987.
- Safian RD, Mandell VS, Thurer RE, Hutchins GM, Schnitt SJ, Grossman W, McKay RG: Postmortem and intraoperative balloon valvuloplasty of calcific aortic stenosis in elderly patients: Mechanisms of successful dilation. *J Am Co Cardiol*: 9 (3), 655-60, March 1987.

Prevalence of Smoking at a Large Sugar Cane Plantation in Hawaii

Susan M Coughlin DO*

Over 350 workers were interviewed at a major sugar cane plantation in the Hawaiian Islands, with regards to their general health status, their personal habits, their cultural background and present employment status. Special attention was given to the prevalence of smoking.

Introduction

After being the primary health caretaker for the employees on a large sugar cane plantation for 16 months, we surveyed the worker population in hopes of identifying prevalent risk factors in this group, and then tried to improve these through education. Since smoking is the largest single preventable cause of illness in the U.S.¹, this was the risk factor most thoroughly examined. A cursory appraisal of the use of alcohol and marijuana, of obesity and of hypertension was also done.

Methods

Using an interpreter when needed, the employees were interviewed from November 1986 through March 1987. The interviews included questions about general health status, smoking habits, ancestry and birthplace. One-third of the employees, who were interviewed in the clinic setting, had chart reviews done on them. The remaining interviewees were questioned at their worksites, which included cane fields, shops, the mill, the powerplant and station houses.

The plantation allowed us to review the employees' sick and accident disability timesheets from 1984 through 1986.

Results

For the purposes of the study, the 114 job descriptions were separated into four categories (Table 1). Birthplace and ancestry

TABLE 1

Job Description	Percent of Worker Cohort
Field Worker	33
Truck Driver	36
Journeyman	20
Supervisor	11

TABLE 2

Birthplace	Percent of Worker Cohort
Hawaii	62
Philippines	33
Mainland USA	4
Other	<1

Accepted for Publication October 1987

*In private practice, Koloa, Kauai.

Address communications to Dr. Coughlin: P.O. Box 3647, Lihue, Kauai 96766

MONEY LIFE INSURANCE VALUES WENT UP IN OCTOBER.

And they'll go up this month, too.

That's because MONEY life insurance and annuity cash values grow at a *guaranteed* rate for as long as your policy remains in force. The face amount and premiums are also guaranteed.

Since 1843, we've lived up to all of our commitments through every economic crisis, including the Great Depression. We've also paid dividends to our policyholders for each of those 144 years, while expanding to meet the ever-changing financial needs of families and businesses.

We're proud of our reputation for superior performance and extraordinary financial strength. We manage in excess of \$22 billion and MONEY enjoys the highest ratings from independent services such as Standard & Poor's A.M. Best.

The past few weeks remind us that stocks are volatile ... bond values can go down ... CD's may not be liquid when you need cash ... and money market accounts are not guaranteed to grow.

Few banks, brokerage houses or other insurance companies can match our record during times of economic uncertainty.

Those that can't are the last you should rely on for *guaranteed* security. MONEY should be the first.

*In Hawaii, it's smart to
know someone with . . .*

MONEY
FINANCIAL SERVICES

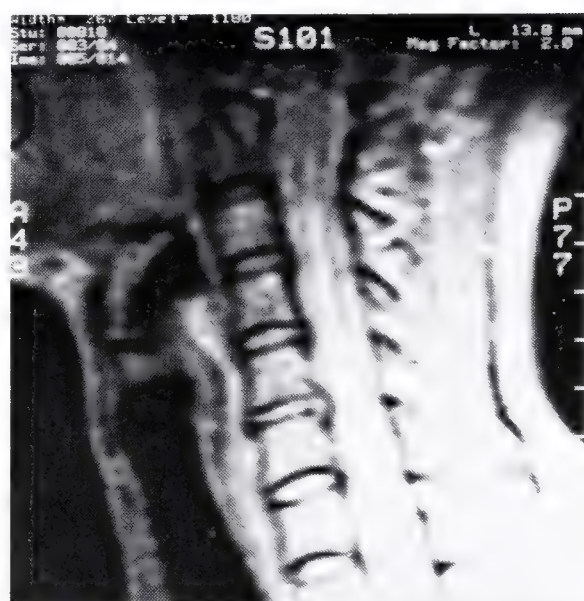
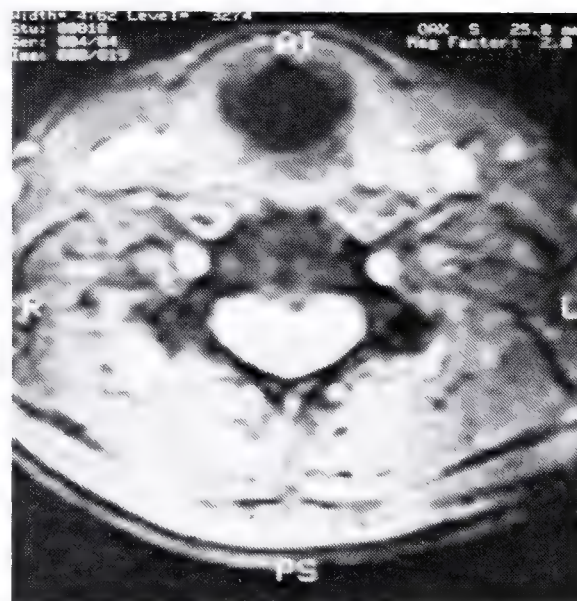
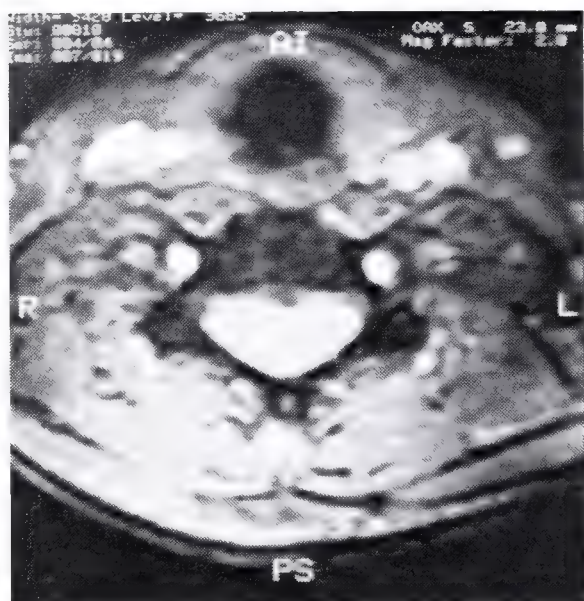
Pacific Tower, Suite 2800 • 1001 Bishop Street • Honolulu, Hawaii 96813
808 - 536-6977

MRI CASE OF THE MONTH

CERVICAL DISC DISEASE

Scan Area: MRI of the cervical spine

Clinical History: Forty-four year old female with disc disease due to auto accident.



*These images were produced by MRI Center
of the Pacific using their 1.5 Tesla GE Scanner.*

Radiologic Diagnosis: The films above in sagittal and axial planes reveal narrowing of the C5-6 intervertebral disc space with central herniation of the nucleus pulposus. There is slight acquired narrowing of the cervical canal. However, the cervical cord has not been displaced.

MR Magnetic
Resonance
Imaging
Center of the Pacific

42A Ahui St.
Honolulu, HI 96813
Phone 531-6841
Hours: 8:00-5:00 Monday-Friday

TABLE 3

Ancestry	Percent of Worker Cohort
Filipino	50
Portuguese	17
Japanese	15
Mixed	10
Caucasian	7

data were also tabulated (Tables 2 and 3). As an aside, birthplace and job description were cross-correlated, which showed upward mobility (Table 4). Average age of the employees was 43. Only 5% were women.

Smoking Data

Forty-three percent of the employees were classified as habitual smokers. The few employees who said they smoked only on occasion, or fewer than one pack a week, were categorized as nonsmokers. (As of 1987, only 30% of the general adult U.S. population smokes².)

Twenty percent of the cohort who no longer smoked had quit for three months or more, and had not resumed the habit. Thirty-seven percent were nonsmokers.

Asked if they wanted to quit, a surprising 84% of the smokers said yes. However, to reduce bias in the study, the respondents were asked if they had tried to quit in the past. A shocking 95% reported previous failed attempts to quit smoking.

Time lost from work. The relationship between smoking and sick and disability time was analyzed. Other studies have shown that absenteeism rates for smokers are approximately 50% higher than for nonsmokers³. On this particular plantation, sick data and disability time for the rank-and-file was available. This data, on more than 300 employees over three years, was dramatic.

TABLE 4

BIRTHPLACE IN RELATION TO JOB DESCRIPTION

Birthplace	Field Worker	Truck Driver	Journeyman/Supervisor
Philippines	55%	34%	10%
Hawaii	13%	41%	45%
Mainland			100%

For every 6.3 hours a nonsmoker was sick, a smoker was sick 10 hours. This amounted to 58% more sick time for smokers (a higher percentage than national statistics), perhaps complicated by other pulmonary inhalants unique to sugar cane cultivation, such as bagasse.

In this study, a review of the disability time resulting from industrial accidents revealed that smokers had twice as much lost time as did nonsmokers. Nationally, smokers have twice as many job-related accidents as nonsmokers⁴.

Incidental Data

Tables 5 and 6 give the results of the correlation between job description and smoking, and between ancestry and smoking.

Other interesting data obtained casually but not explored in depth concerned alcohol and marijuana use. Twenty percent of the employees reported drinking two or more alcoholic drinks per day.

Six percent reported using marijuana on occasion. One-third of the employees said they had hypertension. Ten percent re-

TABLE 5

RELATIONSHIP TO JOB DESCRIPTION TO SMOKING

	Smoker	Quitter	Nonsmoker
Fieldworker	49%	14%	37%
Truck Driver	46%	25%	28%
Journeyman	41%	17%	41%
Supervisor	30%	20%	49%

* 54% of the "haul-cane" truck drivers smoked

t 25% of the welders smoked

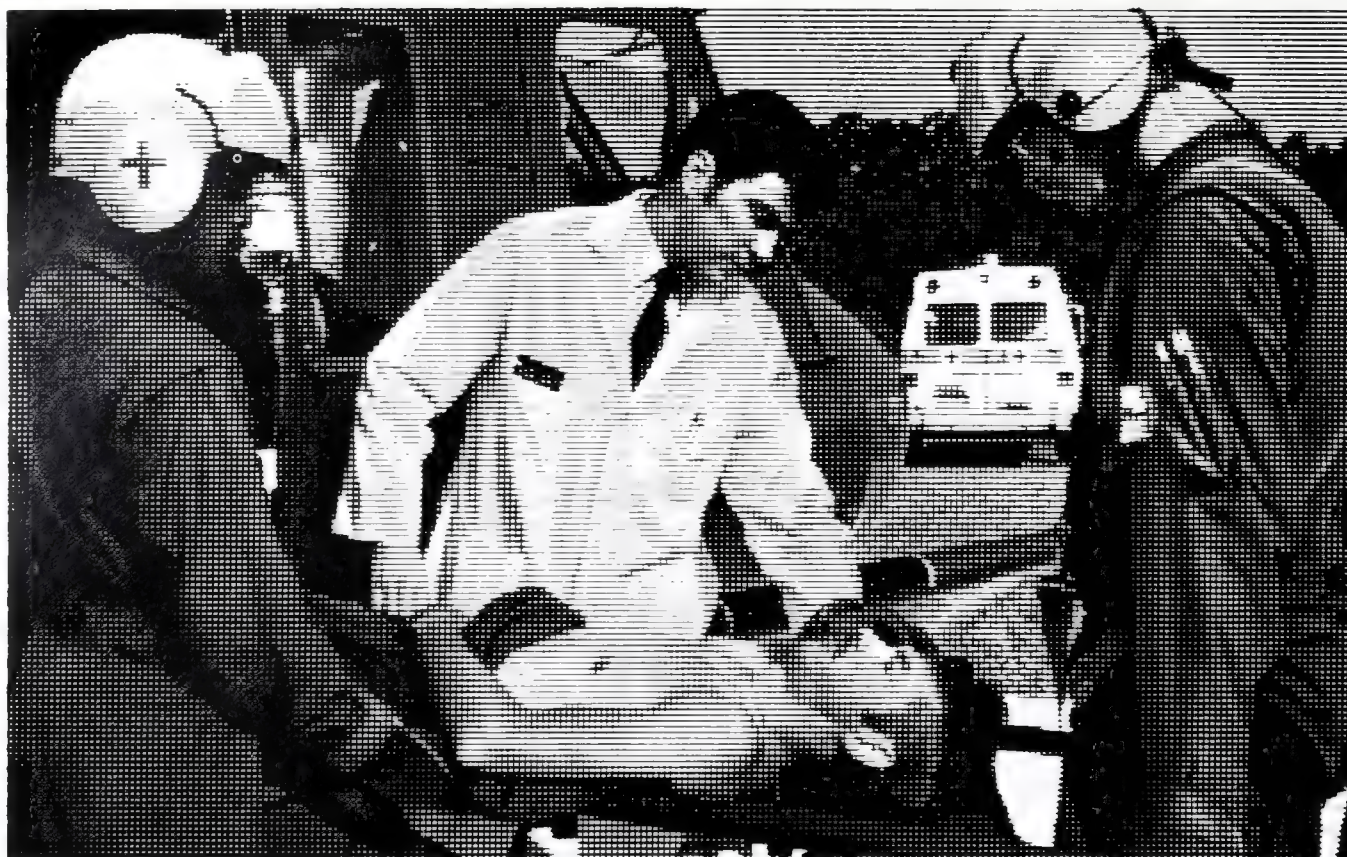
ported having asthma. Six percent reported a history of tuberculosis and 20% were at least 20% over their normal weight.

Discussion

This study's data clearly show three things:

- 1—There is a greater percentage of smokers on this one plantation (43%) as compared to the national average (30%).
- 2—The overwhelming majority of these smokers want to quit (84%).
- 3—Smokers are 58% more likely to take time off sick than nonsmokers, and have twice as much disability time off from occupational accidents.

Plantation managers, when presented with these data, may be impressed. For example, because of accidents, lower productivity as well as cleaning and fire risks, a smoker costs an employer \$350 more annually in short-term losses than a nonsmoker. Long-term losses, including medical costs, absenteeism and early death cost several times that amount⁵. There are examples of businesses with successful antismoking programs. For example, some companies offer \$100 as an



FOR ORTHOPEDIC SURGEONS LOOKING FOR A CHALLENGE.

Your challenge could be the Army Reserve unit near you in Honolulu. It's a unit that requires the services of orthopedic surgeons.

You may wish to explore the challenge of teaching in a major medical center. You may wish to explore the special challenges of your specialty in triage. Certainly you'll be confronted by challenges very different from your daily routine.

You'll also have an opportunity to participate in a number of programs in which you'll be able to exchange views and information with other orthopedic surgeons from all over the country.

The Army Reserve understands the time demands on a busy physician, so you can count on us to be totally flexible in making time for you to share your specialty with your country. We'll arrange your training program to work with your practice.

To find out about the benefits of serving with a nearby Army Reserve unit, we recommend you call our Army Medical Personnel Counselor:

**Call the San Francisco Field Office
(415) 751-1616 Collect**

**BE ALL YOU CAN BE.
ARMY RESERVE.**

TABLE 6

RELATIONSHIP BETWEEN ANCESTRY AND SMOKING

	Smoker	Quitter	Nonsmoker
Filipino *	43%	18%	38%
Portuguese	46%	20%	33%
Japanese	33%	25%	41%
Caucasian	34%	26%	39%
Mixed	52%	11%	35%

*Of the Filipinos born in the Philippines: 46% smoke
Of the Filipinos born in Hawaii: 30% smoke

incentive to anyone who quits smoking for one year.

However, such programs have not appealed as yet to many industries. This particular surveyed plantation is one of them. The reasons for this attitude need further investigation, and specific approaches need to be developed through education.

ACKNOWLEDGEMENT

This study could not have been done without the generous assistance of the American Cancer Society that supplied equipment, reference articles and the writing of the report. The overall guidance and advice of Dr Thomas Hall is also acknowledged gratefully.

REFERENCES

1. Frame PS: A critical review of adult health maintenance: Part 1, *J Fam Pract*: 22:341-346, 1986.
2. American Cancer Society: Facts and figures on smoking, 1986.
3. National Center for Health Statistics, 1979.
4. U.S. Department of Health, Education, and Welfare, 1979.
5. American Cancer Society: A decision-maker's guide to reducing smoking at the worksite, 1985.

. . . the potential is apparent

The Role of Calcium Channel Blockers in the Management of Cerebral Ischemia

M Kathryn Schaefer MD*

Ronald Frederick Schaefer MD**

Cerebral ischemia comprises the common insult in cardiac arrest, near drowning and stroke. In this setting, oxygen delivery is compromised and is inadequate to maintain normal energy production. This triggers several detrimental reactions, such as increased cellular membrane permeability, inhibition of mitochondrial respiration, enzyme phosphorylation and uncontrolled lipolysis¹.

If unprevented, these processes can lead to cell death. Upon resumption of cerebral blood flow (CBF) after ischemia, a delayed hypoperfusion may contribute further to the ischemia-related cerebral damage. This post-ischemic hypoperfusion is caused by an increase in cerebrovascular resistance that may be mediated by the calcium influx that occurs during ischemia¹.

Various calcium channel blockers have been evaluated in the treatment of ischemia and seem to be effective in ameliorating ischemic cerebral damage. Improved neurologic outcome after simulated cardiac arrest has been reported in cats², and in dogs³, that are treated with the calcium channel blocker

nimodipine, before the ischemic event. In dogs, when nimodipine was given only after the ischemic event³, it increased the post-ischemic CBF to the same magnitude as was observed in dogs treated prior to the induced ischemia.

Another calcium channel blocker, flunarizine, significantly improved histological outcome (fewer irreversibly damaged cells) in rats when it was given both prior to, and following cerebral ischemia¹. Nimodipine, when given five minutes post-ischemia, significantly improved the outcome in monkeys that were subjected to 17 minutes of complete cerebral ischemia⁴. In the same study, there was a significant correlation ($P=0.02$)

Accepted for Publication August 1987

*First-year Medical Resident with Integrated Medical Residency Program, Affiliated with John A. Burns School of Medicine.

**Straub Hospital

REAL ESTATE OPPORTUNITIES

NEWEST ATTRACTION!



Marina Frontage in "KEALAU LA KAI". Private end of cul de sac. This three bedroom, 2.5 bath residence is still new enough to command your creative finishing touches . . . i.e., boat dock, patio, and maybe a hot tub? Priced right at \$395,000, Leasehold. MLS 43307.

Call Nancy J. Bathen (R) 395-4565
or Susan L. Burgess (RA) 734-4242

HILL & CO.

specialists in fine residential properties

HONOLULU

373-9844

850 W. Hind Dr., Suite 208, Hono., HI 96821

Earl Thacker Ltd.

SINCE 1930, a TRADITION in HAWAII'S REAL ESTATE INDUSTRY



DIAMOND HEAD - AINAMALU

Luxuriously designed Mediterranean style 4 bdrm/4 bath home. Richly appointed with koa, mesquite, redwood and ceramic tile. Quiet, prestigious and secure. Panoramic ocean view. Pool with hot tub. Central Air. Fee Simple. (37437)

\$2,350,000

Robert Keith (RA) 735-6105

2222 Kalakaua Avenue, Suite 1415, Phone 923-7666

FEE SIMPLE WATERFRONT Delightful Executive Residence

This expansive four bedroom, four bath family home is the perfect CHRISTMAS PRESENT for the professional family that needs space to live and grow in. Situated on a quiet Kailua cul-de-sac this immaculate residence provides serene canal and lake views from every major room. The family room with sit-down bar opens onto the spacious, beautifully landscaped yard which provides a perfect setting for your entertainment needs. **\$450,000.** MLS 43017

LISTINGS NEEDED!!

The real estate market is HOT and we are almost sold out of listings! May we have the pleasure of being of service to you if you plan to sell your properties? We offer the ultimate in personalized professional real estate service. Bill and Ginger Sinsabaugh, Realtor/Owners of WATERFRONT PROPERTIES, INC. personally service each listing and each are "Certified Residential Specialists." As international marketing experts we are the PREVIEWS SELECT broker for Oahu and are listed in "Who's Who in Luxury Real Estate." We look forward to your call.

Office: 531-5311

Cellular: 226-6831

Home: 524-3913



Waterfront Properties
INC

1188 BISHOP ST., #2407

531-5311

DIAMOND HEAD CORAL STRAND PENTHOUSE OCEANFRONT - FEE SIMPLE

Stunning 3-bedroom, 2-bath penthouse with breathtaking 360-degree view of ocean, mountains, Diamond Head and park. Totally refurbished and furnished by Robert Rose in a contemporary tropical off-white decor, this luxury 2,000-plus sq. ft. apartment located in the most prestigious area of Honolulu offers the ultimate in island living. Experience the wonderful sunsets and sunrises, twinkling city lights and a full moon rising above Diamond Head, and you will know Hawaii at its best! MLS New.

Call Penny Bradley (R) 523-0456
or Marysia Coleman (R) 735-5168

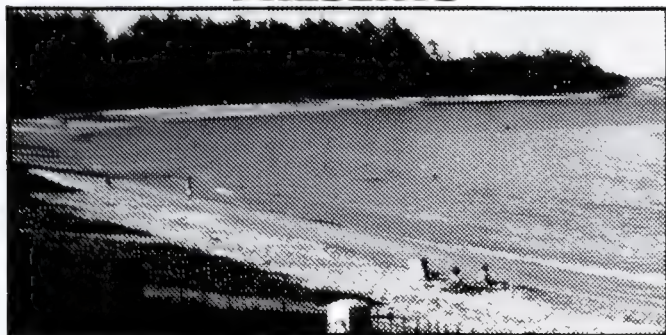
\$2,500,000

Bradley
PROPERTIES LTD
(808) 523-0456

1177 Kapiolani Blvd., Honolulu, HI 96814

REAL ESTATE OPPORTUNITIES

SCULLY ROGERS LTD. PRESENTS



Oceanfront Fee Simple MALAEKAHANA

Heaven can wait! This is as close to heaven as you can get without dying. 1-1/4 Fee Simple Oceanfront acres on Hawaii's most perfect half-moon bay — Malaekahana.

A local young doctor is looking for partners to share his weekend retreat. Form your own HUI & own a part of Paradise. Truly one of the outstanding "PURE HAWAIIAN" offerings available.

**One half interest for only
\$225,000**

Scully Rogers
LTD.

922-4622 • 395-6524

2222 Kalakaua Ave., Suite 715, Honolulu, Hawaii 96815

REAL ESTATE SERVICES

Member: The Honolulu Board of Realtors and MLS

**A TOTAL STAFF — AND REALTY SERVICE
IN WAIANAE**



Anne White (R)



Marie Hatfield (R)

Larry Hatfield (PB)
Madeline Mong (RA)
Doris Oshiro (RA)
Jill Johnson (RA)
Paul Carter (RA)
Sharon Moore (RA)
Bob Hoffman (RA)

**Call:
696-8415**

Alberta Keamo (RA)
Arch Cook (RA)
Valerie Cook (RA)
Denise Martin (RA)
C. Gay Hatfield (RA)
Phylis Perry (RA)
Renee Kamikawa (RA)

PROPERTY OF THE MONTH

One Great Income Producer with Four
Fee Simple rental units. Call Now!!


HAWAII HATFIELD REALTY CORP.

85-833 Farrington Hwy., Waianae

SALES • VA/FHA • MANAGEMENT • NOTARY



THE WAIALAE PINNACLE

 Unique, luxurious, spectacular view, secure, enclave of 5 residential home sites. Adjacent to 1,000 acres of preservation land at the highest zoned peak overlooking Diamond Head & just 8 miles from downtown Honolulu.

This spectacular development includes cobblestone driveways, majestic porte-cochere, with electronic security, brick capped stucco walls & fountain.

4 lots from \$440,000 Fee Simple.

KAILUA KONA

103 ACRES—This land has never been offered for sale. Some of it's special features are comfortable elevation, panoramic ocean views, desirable parcel shape, gentle terrain, abundant shade, fruit & flowering trees, dual access & proximity to Kailua Village. Offered in fee simple for \$2,700,000.

To schedule a private showing or for additional information ...

1060 Young St., #210

523-1381

Hono., HI 96814



WAIALAE IKI

Pristine 4 bdrm/3½ bath home with Diamond Head, ocean and golf course views. Enticing POOL surrounded by tiled deck for entertaining. Air conditioned master suite; solar; tastefully furnished. Lister/Owner.

MLS New..... \$895,000 (FS)

MARSHA STERN INC. (R) 373-2548

GLORIA DAMRON ASSOC. INC.

**KAHALA OFFICE
732-1414**

**HAWAII KAI OFFICE
395-7522**

YOU CAN KEEP THEM IN BALANCE—YOUR FAMILY LIFE AND YOUR MEDICAL PRACTICE.

We'd like to help you spend more time with your family yet receive professional satisfaction from your medical practice. As a member of the Air Force health care team, you'll be able to participate in our group practice concept which will free you of most administrative duties.

Air Force benefits are also very attractive. You and your family will enjoy 30 days of vacation with pay each year plus many more Air Force advantages. Call

Capt. Meyers
(206) 526-3054
Collect



Professional Buyer's Guide HEALTH CARE & ORTHOPEDIC PRODUCTS

- Cervical Collars
- Abdominal / Rib Binders
- Orthopedic Supports / Lumbar Sacral, & Orthocast
- Extremity Braces Supports
- Sleep Pillows
- Wedge Recliner Pillows
- Posture Backrest
- Contourpedic Cushions
- Medical Massage Vibrators
- Cervical Traction Pillows
- Children's Furniture
- Executive, Secretarial & Lounge Furniture
- EZ Sleep Mattress / Pillows
- Adjusting - Therapy - Examination Tables

***Charge It: Use Your Credit Card
To Order Call TOLL-FREE
1-800-321-6870 (national)
1-800-238-7698 (in Ohio)**



Posture Support Mfg., Inc.
P.O. Box 39370
Solon, Ohio 44139

*When ordering ask for literature and price list

between the better histopathology score and the improved neurologic function post-ischemia. The only two notable side effects of nimodipine administration were a mild hypotension as the result of the initial bolus injection, probably due to peripheral vasodilation, and a slight reflex tachycardia during continuous infusion. Both of these were well tolerated.

Although to-date the only studies demonstrating the efficacy of nimodipine in improving neurologic function following complete cerebral ischemia have been done in animals, nimodipine has been used extensively in both the oral and intravenous forms to treat vasospasm following subarachnoid hemorrhage in humans.

It is thought that by blocking the influx of extracellular calcium, the primary source for contraction of the large cerebral vessels, nimodipine reduces the occurrence of the vasospasm that follows subarachnoid hemorrhage, thereby preventing or ameliorating any ischemic neurologic deficit⁸.

In a prospective, double-blind study, oral nimodipine significantly reduced the occurrence of severe neurologic deficits from vasospasm secondary to a subarachnoid hemorrhage. When given intravenously to these patients, 0.5-2 mg/hr nimodipine significantly increased CBF, most pronounced in the least perfused brain regions. The increase in CBF often was associated with rapid improvement of the clinical symptoms⁹.

Calcium has a central role as the putative initiator of events leading to enhanced cellular ionic permeability, dissolution of lipid membrane structure and enhanced protein catabolism, as well as impaired re-perfusion.

Under normal circumstances diglycerides and small amounts of free fatty acids are produced in the presynaptic terminal, as a consequence of the ingress of extracellular calcium ion, leading to membrane depolarization. Calcium then performs its primary function: The activation of a phosphatidylinositol phosphodiesterase that breaks down the phospholipid-phosphatidylinositol envelope surrounding the neurotransmitter.

The process will continue until the additional calcium is sequestered in mitochondria or the endoplasmic reticulum, or is extruded from the cell. All of these are energy-consuming processes. It is known that after an ischemic event, cytosolic calcium is abnormally high.

The immediate result of an hypoxic-ischemic insult is a dramatic reduction in ATP, leading to failure of ion-pumping

activities, with resultant sodium intrusion into the cell and potassium extrusion. Massive calcium influx into the cell occurs after extracellular potassium concentrations reach a threshold value, around 15uM/ml, presumably because potassium-induced cellular depolarization opens voltage-dependent calcium gates.

Resynthesis of phospholipid from diglyceride and from free fatty acids, is an energy-dependent process requiring amounts of ATP far in excess of those seen during brain ischemia. Therefore, there would be a significant increase in intracellular free fatty acids which, by means of their detergent properties, could eventually alter plasma membrane integrity, allowing uncontrolled ingress of calcium into the cell, further amplifying the above process.

An abundance of free fatty acids is also known to inhibit the translocation across the inner mitochondrial membrane, which causes uncoupling of oxidative phosphorylation and cessation of mitochondrial respiration.

Arachidonic acid, one of the free fatty acids that continues to rise during the ischemic episode, can be measured experimentally; its levels reflect the duration of ischemia. Following recirculation, in the presence of oxygen, cyclo-oxygenase catalyzes the breakdown of arachidonic acid into vaso-active thromboxanes and prostaglandins. It is the vasoconstrictor action that predominates, following a period of ischemia. Abnormal vasoconstrictive activity is believed, at least in part, to cause delayed hypoperfusion following cerebral circulatory arrest.

Another pathological event related to the calcium-induced membrane permeability to previously excluded ions, is that the intracellular concentrations of sodium and chloride ions now increase and osmotically draw water into the cell.

During the initial period of ischemia, this causes only cellular swelling, with no net gain in water content of the brain. However, with re-circulation, brain water increases and the cerebral edema caused by this net gain in hydration eventually can impede cerebral blood flow.

Another piece of evidence that suggests calcium may be the triggering event leading to ischemic cell-death, comes not from brain studies but from studies of cultured hepatocytes⁶. In those studies, the viability of hepatocytes after exposure to 10 different hepatic-membrane toxins, including a calcium ionophore, was determined under conditions in which the extracellular calcium was at the

Many Investment Managers Try to Keep Pace with the Market...

PERFORMANCE JAN. 1 - OCT. 19, 1987

DOHMEN
CAPITAL
MANAGEMENT

**UP^{*}
21%**

S&P 500
DOWN 4.9%

Our Clients Prefer Making Money!

***Dohmen Capital Management is still up 21%
this year even after the crash!**

Inquiries from investors with \$500,000 or more are welcome.

*Performance from January 1, 1987 to October 19, 1987. Past performance is no guarantee of future results. Performance figures include transaction fees, reinvestment of dividends, and earnings, but before advisory fees and taxes. Results relate only to a representative account chosen for its eligibility to accept all investments; there were no additions or deletions of capital in the account over the time period. Other managed accounts have outperformed and underperformed this account depending upon the date of entry to the program. Mutual funds reduce risk via diversification, however, losses are possible.

Please send me information concerning the
DOHMEN CAPITAL MANAGEMENT PROGRAM

WELLINGTON CAPITAL, INC.

733 Bishop Street, #1800, Honolulu, Hawaii 96813 (808)524-8063

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ PBNP 05 12/87



WELLINGTON
524-8063

KOKUA

Since 1979, high standards of integrity and professionalism have enabled Kokua Nurses to become the top temporary medical placement company in Hawaii for nurses and para-professionals.

Kokua Nurses & Kokua HOME HEALTH AGENCY

Specialists in Private Duty Nursing,
Hospital and Office Staffing.

Licensed and Certified for
Medicare/Medicaid Reimbursement

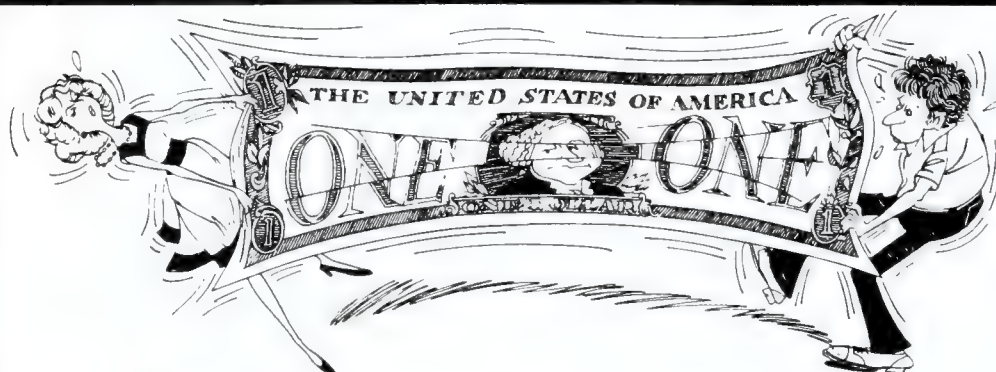
RN'S • LPN'S • Nurses Aides
Medical Assistants
Travel Nurses • X-Ray &
Medical Technicians • Physical
& Occupational Therapists
Medical Social Workers
RN Supervision • Speech
Pathologists

Kokua Nurses

ON CALL 24 HOURS 536-2326
1210 Auahi Street



APPLICANTS WELCOME



S-T-R-E-T-C-H

YOUR

SAVINGS

Call

PEQEX, Inc.

537-2724

We're here to serve you with a complete selection
of new and used medical equipment and supplies.

normal concentration of 10^3 .

When the hepatocytes were mixed separately with each of the 10 membrane toxins, cellular viability was sharply reduced in all cases, falling to as low as 6% of control in the presence of the calcium ionophore. In a parallel study all conditions were the same except that the extracellular calcium was reduced to an absolute minimum.

In contrast, cell viability after one hour in the presence of the 10 hepatotoxins, as measured by trypan blue, was 98% of control. The authors postulated that cell death was, in the last analysis, a function of the entry of calcium into the hepatocyte and was not a specific function of each of the toxins⁶.

An examination of calcium-related pathometabolic pathways suggests that calcium is the triggering mechanism leading to cell death after prolonged ischemia. On the one hand, calcium normally breaks down just enough phospholipid to permit transmission in the synapse when permitted to enter the cell in graded amounts.

On the other hand, when uncontrolled entry of calcium into the vulnerable neuron occurs because of depletion of energy stores, this same process of breakdown of phospholipid may now progress to the point of destroying the cell. "The well-contained fire in the hearth thus spreads to involve the entire house."

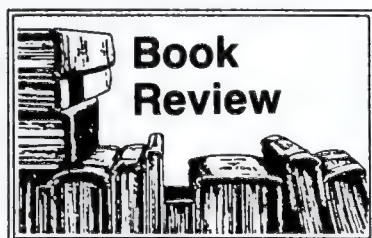
Conclusion

The above animal experiments confirm the hoped-for benefits of calcium channel blockers following cerebral ischemia. Currently there is a large prospective, randomized, blind, human trial of calcium channel blockers being performed by the Brain Resuscitation Clinical Trial (BRCT) Group, which is an international, multi-institutional group coordinated by the University of Pittsburgh.

REFERENCES

1. Deshpande JK, Wieloch T: Flunarizine, a calcium entry blocker, ameliorates ischemic brain damage in the rat. *Anesth* 64:215-224, 1986.
2. Hoffmeister F, Benz V, Heise A, Krause HP, Neuser V: Behavioral effects of nimodipine in animals. *Arzneimittelforsch* 32:347-360, 1982.
3. Steen PA, Newberg LA, Milde JM, Michenfelder JD: Nimodipine improves cerebral blood flow and neurologic recovery after complete cerebral ischemia in the dog. *J Cereb Blood Flow Metab* 3:38-43, 1983.
4. Steen PA, Gisvold AE, Milde JH, Newberg LA, Scheithauer BW, Lanier WL, Michenfelder JD: Nimodipine improves outcome when given after complete cerebral ischemia in primates. *Anesth* 62:406-414, 1985.

5. Shapiro HM: Post-cardiac arrest therapy: calcium entry blockade and brain resuscitation. *Anesth* 62:384-387, 1985.
6. Schanne FAX, Kane AB, Young EE: Calcium dependence of toxic cell death: A final common pathway. *Sci* 206:700-702, 1979.
7. Agardh CD, Siesjo BK: Hypoglycemic brain injury: phospholipids, free fatty acids, and cyclic nucleotides in the cerebellum of the rat after 30 and 60 minutes of severe insulin induced hypoglycemia. *J Cereb Blood Flow Metab* 1:267-275, 1981.
8. Koos WT, Auer L, Boker DK, Fuhrmeister U, Gaab M, Jaksche H, Kostrom H, Meinig G, Muizelaar JP, Perneczky A: Treatment of ischemic neurological deficits from cerebral vasospasm after subarachnoid hemorrhage with nimodipine. Proceedings of the First International Nimotop Symposium, Munich, 1984.
9. Gaab MR, Haubitz I, Brawanski A, Korn A: Acute effects of Nimotop on cerebral blood flow and intracranial pressure. Proceedings from First International Nimotop Symposium, Munich, 1984.



On Being a Therapist, Jeffery Kotler.

Blessed are those therapists who have experienced and are experiencing true "BEING"—living fully, physically, intellectually, socially, emotionally and spiritually.

Fortunate are those therapists who derive pleasure and meaning from and in their professional life and find love and happiness in their personal life.

Precious human beings, indeed, are those therapists who have inner peace, serenity and tranquility and have a sense of oneness with their families, clients and the universe around them.

The professional journey in "being a therapist," in exploring one's own being, in sharing one's being and participating in the being of the client, goes through the experiences of ecstasy and agony, pleasure and pain, joy and sorrow, boredom and challenge, and void and fulfillment.

What an experience of the emotional universe?

What an experience of the varying dimensions of life?

Jeffery Kotler, in his book *On Being a Therapist*, describes clearly how a therapist's emotional well-being is affected by the pain, suffering, anguish, conflict, confusion, crisis and "being" of the client. It is admirable that he shares his personal experience of being "shell-shocked" because of the close proximity

Did you know?

Saint Francis Medical Center is one of the top three hospitals in Hawaii... and the fastest growing.

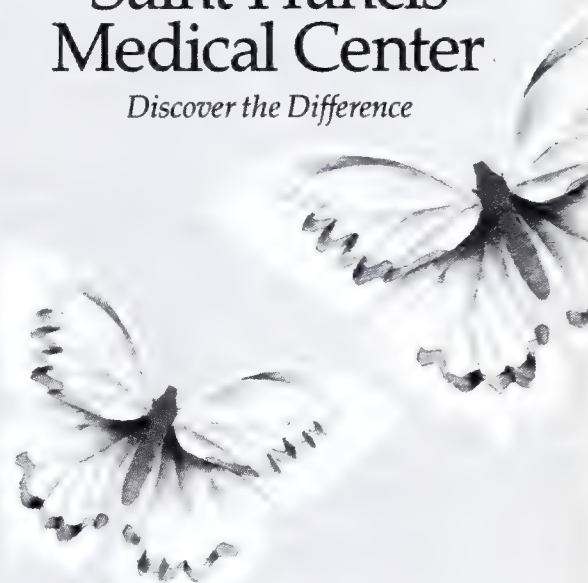
Leaders in quality health care.

Serving people of all faiths, beliefs, or ethnic backgrounds.



Saint Francis Medical Center

Discover the Difference



MERRY CHRISTMAS

From US to YOU

Thank You for Your Support



HEALTHCARE SERVICE & SUPPLY

670 Queen Street, Honolulu, HI 96813
Hours: 8am-4:30pm Monday thru Friday

Ph. 538-7057

Formerly X-ray and Medical Equipment, Inc. A division of The Waterhouse Group.

OH, WHAT RELIEF . . .

Sudden staff illness, planned vacation, excess workload can put strain on your support staff. We can provide relief.

Our staff is specifically trained and suited to adapt quickly and perform in the most demanding situations.

- Available on call 24 hours a day.
- No bonding, insurance, payroll, taxes, benefits to pay.
- Specialists in medical staffing needs.

526-3761



Kahu Malama Nurses, Inc.
680 Ala Moana Blvd., Suite 412
Honolulu, Hawaii 96813
(808) 526-3761

Medical Offices Have a Choice! GET THE BEST



TRUE Multi-User
Medical Computer Systems

Established Hawaii Client Base



MICRODYNE

THE
FULL SERVICE
COMPUTER
COMPANY

524-1740

677 Ala Moana Blvd. Suite 411

with his unhappy female client's "battlefield"; her words haunted him to the degree that he broke down, feeling that he would lose his wife. Who can forget the play and the movie *Equus* in which blunt and sarcastic remarks by an adolescent client — after months of treatment — agonized the psychiatrist and haunted him?

He gives us a perspective as to how a therapist is influenced by his personal life, his cultural heritage, his study of literature, philosophy, art, music and sculpture and his travel experiences. Freud was influenced by Shakespeare, Sophocles and Nietzsche; Jung by Goethe, Schopenhauer and Kant; Rollo May by Kierkegaard, Van Gogh and Sartre. Indeed, Kotler himself was influenced by his travel to Peru to observe Peruvian culture. Who among us would not be influenced by the Inca civilization and Machu Pichhu?

The science and art of therapy involves the merging of one's personal and professional life into a unified perception of self and world.

On Being a Therapist alerts us to be ever vigilant and aware of our prejudices, biases, insecurities, mood swings, rigidity, isolation, boredom, fatigue, insomnia, frustrations, apathy, collapse of meaning, pessimism, despair, breakdown of professional effectiveness and self-destructiveness. It makes us aware of our embedded system of "denial," rationalizations, distortions, the disguising of our imperfections and lapses, and of our self-deceit. It instructs us to guard against self-indulgence, egocentricity, narcissism, need for approval and need for control. It warns us to monitor ourselves carefully, to exercise self-confrontation and self-control, so as not to cause "therapeutic incest" and betray the trust of our clients.

Blessed are the therapists who are explorers bent on discovering uncharted territory in their clients; who are poets and create images, illustrating with ideas the entrance to therapy; who are musicians creating flow and tranquility and who approach their clients without presupposition and expectations but with wisdom.

Privileged are the therapists who have the opportunity to enjoy continuous intellectual, emotional and spiritual growth; who have the opportunity to manifest their creativity and to live up to their full potential. Kotler's creativity, as manifested in his book, is a catalyst that will permit us full realization of our potential as therapists.

Krishna Kumar MD

My Mana'o

What of the HMA's 131st?

On Oct. 9-11, 1987, in the pleasant surroundings of the Kauai Hilton, the 1,792-member (as of August 31) Hawaii Medical Association met for its 131st Annual Meeting. Of the important issues on which the House of Delegates deliberated, we would like to bring the following to your attention.

The House of Delegates was graced by the presence of Robert E. McAfee MD, AMA Trustee and a surgeon in Portland, Maine. He not only installed the new officers of our professional association, but also participated actively in the meetings of the reference committees and the House. This was much appreciated.

What Did We Do for Ourselves?

Auwe! We flailed ourselves by increasing annual HMA dues to \$520. However, this was an increase of only \$15, which comes out to 3% — rather little as compared to the rise in the cost of living. We also adopted the concept of a balanced budget for 1988, with not nearly the wrath and fireworks exhibited by the U.S. Congress versus the Reagan administration. We even allotted an extra \$5,000 for emergencies. In short, our financial situation has been assessed by our experts (MDs as well as CPAs) as being essentially sound.

In exchange for giving up some upper-floor space for rental at our new building on Beretania, it has been necessary for HMA to build on extra ground-floor space. This has required taking out an additional mortgage; HMA will be paying total monthly ca. \$13,000, to the entity of physicians who have invested in the building, and hopes to own it itself in 10 years. (Do our high dues decelerate THEN?)

We approved the excellent work of the CME Committee and even granted it an increase to \$2,900 of funding for it to be able to send two delegates instead of one to the ACCME in Chicago in April 1988.

The House of Delegates asked the Physicians Committee to put on a CME program on "The Impaired Physician" in 1988. That committee was also instructed to double its efforts to find and assist the impaired physicians in our midst and to report to the HMA Council in six

FIRST: BEST



CDL 350

Complete with:

- Battery
- Battery Charger
- Extra Battery
- Leather Case
- Shoulder Strap
- 3 Year Warranty

Only 1.6 Lbs.!

\$2195

IN TOUCH
Communications

GTE

Authorized Agent

Mobilnet®

Cellular Communications

395 - 0311

Medical

• PHYSICIAN

• PHYSICIAN'S ASSISTANT

One of America's largest health care corporations is currently seeking full and/or part-time Physician and Physician's Assistant for our plasma donor center located in Honolulu.

Responsibilities will include performing physicals in conjunction with donor screening and evaluation. We will consider licensed but non-practicing Physicians who wish to work on a consulting basis. Positions are for days only; no nights, evenings, Sundays, or call. Must have current license.

We offer an excellent work environment and highly competitive compensation including company-paid liability protection. For immediate consideration please send resume or apply in person to Center Manager

**Alpha
Plasma Center**

**3179 Koapaka St.
Honolulu, HI 96819**

Equal Opportunity Employer M/F

Alpha

**THERAPEUTIC
CORPORATION**

months.

We asked the Association to request of the UH Medical School that it include in its curriculum courses in substance abuse, including in particular alcoholism.

As a result of Bob McAfee's suggestion, the House of Delegates recommended that the AMA be asked to bring the "PADS" program to Hawaii. PADS, the AMA's seminar on prescription writing, includes an examination by experts for four aspects of prescription writing abuse; the mnemonic formula, "Dated, Duped, Dishonest and Disabled," covers these aspects. It stands for the types of prescriptions that are no longer acceptable; dated, or old, prescriptions; duped by the caller; prescription for profit and prescription for oneself. We hope all members who deal with prescriptions take part in the program.

The Health Care Costs Committee was asked to keep tabs on the AMA/Harvard ongoing study soon to be com-

pleted, while the Fee Survey Committee was authorized to continue to conduct fee surveys during 1988. But, on advice of our counsel, Tom Rice, such surveys were not to be published, even in retrospect, so as not to run afoul of the FTC. Any member may look at the results on request, however, at the offices of the HMA.

So What Has the HMA Done for the Community and Our Patients?

The House of Delegates approved the report of the Health Manpower Committee and exhorted it to continue its study of the reasons for the nursing shortage. The Committee was asked to report back to the House in 1988 with recommendations for a resolution of the problem. The House also approved the determination of the HMA to support legislation favoring increased funding for and enrollment in schools of nursing in Hawaii.

Commissioner Mills' recommendation

that the HMA continue to educate the public on the problems associated with teen pregnancies was adopted.

The House adopted Executive Director Jon Won's recommendation that the HMA seek additional funding from the State through the Department of Health for support of the HMA's Hawaii Tumor Registry, and that the HMA continue to support HTR. Funding by NCI nationally has not increased over the years, but the costs have escalated. Jon reported that State Health Director John Lewin MD has already indicated a willingness to help.

The House felt that the Committee on Sports Medicine probably had enough residual funds derived from previous successful sports symposia and might generate more, therefore they reduced its budget request for 1988 drastically.

However, it left the door open to additional requests for assistance, in view of the "good things" this committee has done in terms of educating players, coaches, sports officials and parents on the need for preventing injuries by learning safe practices and protection (see Resolution No. 7 below).

By contrast, the House went along with funding our continuing CCOP, Community Clinical Oncology Program, to the tune of \$20,000 in 1988. There is the possibility that this might be picked up through an association with ECOG, the Eastern Cooperative Oncology Group, and in particular the New Jersey CCOP (our own Tom Hall MD has transferred to the Newark New Jersey Cancer Research Center). Since the NCI budget has been severely cut by the Administration, its support in funding cancer research has been withdrawn from 38% of the CCOPs around the country; Hawaii, unfortunately, is one of them.

The HMA feels that it has a commitment to continued support of cancer patients in the protocols. Things look favorable for New Jersey's assistance.

Incidentally, but very pertinent, is the revelation that the Hawaii State Medical Association is the only one of 50 states that funds this for its community.

CLASSIFIED NOTICES

To place a Classified Notice call Leilani at 521-0021.

4 line minimum, approximately 5 words per line. Payment must accompany order.

EMPLOYMENT OPPORTUNITIES

MAUI

PEDIATRICIAN (B.C./B.E.) Needed for multispecialty professional corporation on the lovely Island of Maui (Kaiser Permanente). Salary depending on qualifications. Excellent fringe benefits. Full malpractice coverage.

D.L. McCleary, M.D.
Kaiser Wailuku Clinic
80 Mahalani Street
Wailuku, HI 96793

(An Equal Opportunity Employer)

PHYSICIANS WANTED

For multispecialty clinic on Kauai - Internal medicine, OB/GYN, family practice. Call Dr. R. Weiner 332-8523 or Lihue Family Health Center 245-8874.

Pediatrician Kauai

Needed for expanding quality oriented and accredited 40-physicians multispecialty group. Practicing in modern (non-profit hospital affiliated) outpatient facility. Competitive starting compensation, malpractice insurance coverage provided, full stock holder status eligibility within 2 years, 4 week paid vacation plus two week scientific meeting and travel reimbursement, disability & life insurance, tax shelter pension plan, etc. Contact:

Clarence Funaki, M.D., President.
Kauai Medical Group, Inc.

3420-B Kuhio Hwy. Lihue, Kauai 96766.
808-245-1500.

MEDICAL DIRECTOR & STAFF PHYSICIANS Needed for Waikiki Health Center. Prefer board certified, in family practice or internal medicine. Phone Margaret 922-4787.

EMPLOYMENT OPPORTUNITIES

MAUI

GENERAL INTERNIST OR FAMILY PRACTITIONER (B.C./B.E.) needed for multispecialty professional corporation on the lovely Island of Maui (Kaiser Permanente). Salary depending on qualifications. Excellent fringe benefits. Full malpractice coverage.

D.L. McCleary, M.D.
Kaiser Wailuku Clinic
80 Mahalani Street Wailuku, HI 96793
(An Equal Opportunity Employer)

KAISER PERMANENTE ON OAHU looking for physicians. Offers wide range of family practice, including obstetrics, in small-to-medium-sized clinic settings. Residency training, board certification preferred. Send C.V. to: Hawaii Permanente Medical Group, Inc., 3288 Moanalua Road, Honolulu, HI 96819.

(An Equal Opportunity Employer)

SERVICES

DOCTORS: Does your office need upholstery work? Classic Auto Treasures Upholstery Division has expanded their expertise. We now provide a 1-day upholstery service on exam tables, office chairs, furniture, etc. Wide range of colors of top of the line vinyl and fabrics.

846 Pohukaina Street 537-1100.

DIAGNOSTICS INC.

Authorized independent contractor for the sales of the AMAS® (anti-malignant antibody) test, a product of Oncolab, Inc. Phone 545-3800.

Resolutions

No. 1 was adopted. It stipulates that the HMA should adopt a policy "that Medicare reimbursement to physicians will be allowed for services rendered to immediate relatives as defined by Medicare *except for such relatives who reside in the same household as the physician.*" Medicare Part B is prohibited from reimbursing physicians for services rendered to immediate relatives, but the list is ye-

long, up, down and sideways!

No. 2 was not adopted, despite a floor fight. It concerned one of 195 Health Policies for the American People (HPA) developed by the group headed by ex-AMA president Boyle, one which the AMA House of delegates had not adopted but had "filed." The feeling among out members was that we should not jump ahead of the AMA.

No. 3 was adopted: To assist the State government in developing long-term health-care plans and policies for the elderly.

No. 4 was adopted: That the HMA participate in planning for an implementing policies for the care of patients with AIDS.

No. 5 was adopted: That the HMA become involved in the health problems of the Pacific Ocean Basin.

No. 6 was adopted: This resolution puts the HMA squarely behind the newly formed "independent" *Medical Coalition for Tort Reform*. The Coalition is composed at present of the HMA (initially through its Tort Reform Committee that has now melded into the Coalition), the Hawaii Federation of Physicians & Dentists and the Hawaii chapter of ACOG. The other specialities will be invited to join. Neal Winn is chairman. It is the first time that the HMA has delegated some of its authority to an entity not under its mandate.

Although each component will be receiving regular reports from the Coalition, the latter will be on its own. Chairman Winn has stipulated that unless there is full agreement on policies and stands proposed, the Coalition will not take a stand. However, it was gratifying to witness whole-hearted support on the part of HMA'S House of Delegates, particularly on the first item of the Coalition's agenda: That if the matter of a Patients Compensation Fund (PCF) comes up in the Legislature, we are opposed to participation in the PCF by physicians being mandatory, in order for them to get or maintain a license to practice medicine.

No. 7 was adopted: That HMA purchase a film for \$225 on *Head and Spinal Injuries* to be shown in the schools of Hawaii as a means of minimizing such serious injuries in school sports.

Resolutions submitted in advance of the annual meeting of the House are a means whereby members can introduce issues for discussion — it is a way for them to participate in THEIR association — instead of grouching about the HMA in the hallways of academia, on the golf course or in the lounges and

THE GIFT FOR THE PERSON WHO HAS EVERYTHING BUT TIME.



mele Kalikimaka

**Honolulu Cellular
Telephone Company**



1161 Kapiolani Boulevard, Honolulu, Hawaii 96814 / 545-4765

If you do business in Hawaii . . .

and want to keep on top of civil cases in our courts, or tax liens, public hearings, incorporations and partnerships, or almost anything else of value in your practice

. . . we have news for you



**PACIFIC
BUSINESS
NEWS**

For information call 521-0021.

POCKET CELLULAR! NEC P9000

\$1895



Authorized Agent.
GTE Mobilnet®
Cellular Communications

395 - 0311



CONTINUITY-OF-CARE™ 24 HOURS A DAY

By combining your expertise and ours for complete patient care, our flexible Continuity-of-Care™ programs enable us to design the optimum home care program for you.

Hawaii's most complete homecare supplier



500 Ala Kawa Street
Honolulu, Hawaii 96817
845-5000

corridors of hospitals. The only other input comes from the officer, the commissioners and the committee reports and recommendations.

The Address of Robert E. McAfee of AMA

Dr. McAfee is also a member of the JCAHCA (Joint Commission for the Accreditation of Health Care Agencies), the new name of the old JCAH. It is considering an "agenda for change" and "it will take a look at outcomes more than just fussing with facilities and procedures," he explained.

Speaking first of all about his State of Maine, he told of the funding by the state of the Impaired Physicians Program, that it had been made illegal for a minor under 18 to purchase cigarettes, that the Maine Medical Association reviews the medical diagnoses and supporting data in hospitals and discusses the deviations from the the norms and standards of care, in secret and without rancor, to the extent that both Blue Cross and Blue Shield are impressed.

McAfee said Maine had had moderate success with tort reform. In general, he deplored the term "medical malpractice" and suggested we all use "liability crisis reforms" and "liability insurance." It is important to recognize that physicians have to join a coalition of like interests across the board in our society, in order to have effective power for change.

"Physicians are not going to succeed by going it alone," he said. "We need to share with our patients." He went on to point out that the AMA is hard at work on the issue and is looking for alternatives.

Although the AMA is now 290,000 members strong, and growing, McAfee ended on a sobering note: "At present, there are 1.7 applicants for each slot in admissions to medical schools, a drop of 0.2 each of the past three years and the lowest ratio ever. Many of my influential colleagues no longer simply do not encourage; they actually *discourage* their sons and daughters from going into medicine."

J.I. Frederick Reppun MD
Editor

Clinical Pathologist's Easy Chair

Francis H. Fukunaga MD

Prothrombin Time

The prothrombin time (PT) is the most commonly performed coagulation test and is most often used to monitor oral anticoagulant therapy. Vitamin-K antagonists initially cause a fall of Factor VII followed by a decrease of Factors II (prothrombin), IX and X but do not affect Factor V.

A prolonged prothrombin time may also be due to *congenital* deficiencies of Factors I, II, V, VII, and X; *Vitamin-K deficiency* resulting from an inadequate diet, malabsorption, sterilization of the G.I. tract by antibiotics, some drugs, or biliary obstruction or circulating *anticoagulants*.

Comparison of prothrombin time reports between different centers shows poor agreement because of the many factors that lead to variations in the test. These factors include the many different reporting systems and the considerable variation or reagents and instruments.

The performance characteristics of the thromboplastin reagents differ because of their different species and tissue sources and the relative concentrations of other components such as calcium. When the College of American Pathologists compared the PT results from many laboratories, they found a wide variation but there was good comparability between labs that used the same reagents and instrumentations.

The prothrombin time reporting methods include: (1) PT in seconds, (2) PT ratio, (3) the PT percent activity and (4) the international normalized ratio.

Prothrombin time in seconds is the most commonly used method in the United States. The therapeutic range is 1½ to two times the normal prothrombin time.

Prothrombin time ratio (patient PT/normal PT) was adopted by the British Committee of Standards in Haematology. The committee's therapeutic range is a ratio of 2-to-2.5, but Europeans use human or bovine brain thromboplastin reagent while American manufacturers use rabbit brain. When the British therapeutic range was used in the United States, there was a 20% incidence of bleeding complications. The reason is

Are You Paying *Too Much* For Malpractice Insurance?

Are You Paying *Too Much* In Taxes?

Alternatives **ARE** Available!

To find out more about the alternatives available to physicians, just call or write for a free brochure.

EQUITRUST CONSULTANTS

150 Hamakua Drive, #366
Kailua, Hawaii 96734
(808) 254-4816

Yes! Please send me more information about alternatives available to physicians.

Mail this coupon today or call (808) 254-4816

NAME _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

PHONE _____

MJ/12/87

Next time you feed your face, think about your heart.

Go easy on your heart and start cutting back on foods that are high in saturated fat and cholesterol. The change'll do you good.



American Heart Association
WE'RE FIGHTING FOR YOUR LIFE



FROM THE MONUMENTS OF THE GOD KINGS. ANGKOR WAT, CAMBODIA.



*KHMER Sculpture
Bronze Lokeshvara
12th - 13th Century
The Bayon, Angkor Wat Cambodia*

Perhaps the most difficult art for the collector or investor to obtain are the relics from the ancient temples of Cambodia.

Treasures of Asia has acquired distinctive antique Khmer pieces and extends an invitation to view the collection. Each particular object is accompanied by a certificate of authenticity.

Please call to ensure we are in the office.

TREASURES OF ASIA INC.,

SUITE 1007 EXECUTIVE CENTRE,
1088 BISHOP STREET,
HONOLULU, HI 96813 • TELEPHONE 537-3202

**We'd like to introduce you to the newest spokesman
for the American Heart Association.**

Just as soon as he's born.

The same baby who, ten years ago, wouldn't have lived to speak his first word. But now doctors can look inside the hearts of unborn babies, detect disorders and correct them at birth. Thanks to research, he can have a healthy, normal life.



American Heart Association

WE'RE FIGHTING FOR YOUR LIFE

that rabbit brain reagent gives a shorter therapeutic range of 1.5 to 2.

Prothrombin time percent activity is the least meaningful method. It gives inaccurate results because of the error of dilution. The percent activity is estimated from a graph constructed by plotting percent activity versus the prothrombin time of various dilutions of normal plasma. The error introduced is due to the simultaneous dilution of clotting factors other than prothrombin, such as Factor V and fibrinogen, which also affect the prothrombin time.

Therefore, a prothrombin time of 50% is not equivalent to a true 50% decrease of the prothrombin in the anticoagulated individual. The use of absorbed plasma (which is depleted of prothrombin but has Factor V) instead of saline to dilute the normal plasma further complicates the results because a 15% prothrombin activity using absorbed plasma means only a mild coagulation defect but a much greater defect when saline is the diluent.

The International Normalized Ratio (INR) was proposed at an international meeting in Leydig in an attempt to have a uniform reporting system. It provides a means for minimizing variability between different laboratories and improves consistency of therapeutic monitoring. The INR is calculated by raising the prothrombin time ratio to the ISI power. ISI is the International Sensitivity Index of the thromboplastin, which is determined by the reagent manufacturer.

The ISI value may vary depending upon the test method and it therefore should be ideally specified for the instrument and technique. When the same reagent is used, the ISI value for manual tilt tube methods differs from that of the mechanical methods, such as the Fibrometer.¹

The INR system is intended for assessing patients stabilized on long-term coumadin therapy and may vary during the initial period of treatment since the various clotting factor levels are changing rapidly.

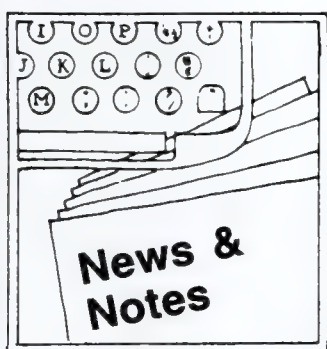
Specimen processing: The anticoagulant of choice is sodium citrate (3.2 or 3.8%). A 9-to-1 mixture of blood to anticoagulant must be promptly and adequately mixed to assure binding of blood calcium. The 9-to-1 ratio is acceptable only if the hematocrit is between 20% and 60%.

If the plasma volume is low, as in polycythemia, the residual citrate will neutralize the reagent-calcium added to the test system to result in a false prolongation of the prothrombin time.

The anticoagulated sample should be kept at 4 (+ or - 2) degrees C (melting ice) and centrifuged within 30 minutes after venipuncture at a minimum speed of 100 RCF for 10 minutes. The plasma should be transferred to a clean non-wettable tube with a plastic pipette and stored at 4 degrees C. Each laboratory should develop its own normal range using a minimum of 30 healthy individuals and a new range should be developed whenever new reagents or instruments are introduced.²

REFERENCES

1. Poller L: Laboratory control of anticoagulant therapy. *Sem Thrombosis Hemostasis* 12:13-19, 1986.
2. Poulsen KD: Controlling preanalytical variables in coagulation testing. *J Med Tech*: 3:561-565, 1986.



HENRY YOKOYAMA, MD

Medicare News

The General Accounting Office released a report that says the average physician received 68% of his gross income from Medicare in 1981-82 with hospital-based specialists getting up to 98% of their incomes . . .

The monthly premium that the nation's 30 million Medicare patients pay for physician services (Medicare Part B) has climbed from \$15.50 to \$17.90 since Jan. 1 . . . The \$492 first-day hospital fee had been scheduled to increase by \$80, but Congress may waive the 3% cost-of-living increase for Jan. 1 . . . When Medicare began operations in July 1966, the first-day cost was \$40 and the monthly premium \$3 for Part B coverage.



O.P.T.I.O.N. Care of Hawaii
A Home IV and Nutritional Service

QUALITY, COMMUNICATION AND EXCELLENCE IN INTRAVENOUS HOME CARE...

Our clinical Pharmacists and Registered Nurses are dedicated to quality patient care, timely communication and excellence in home I.V. Therapies.

O.P.T.I.O.N. Care® is a sound, cost-effective and rewarding alternative, offering your patients an option in health care they may not have considered possible.

...WE'RE COMMITTED TO IT

For More Information **CALL 254-5841**

Pali Palms Plaza • 970 N. Kalaheo Ave., Suite C-106 • Kailua, Hawaii 96734

HERE'S THE NEW ALTERNATIVE

If you forget or don't have time to take your car in for service — consider this alternative. You never leave your office. Your car goes in for service, but you don't. It's the easiest way to deal with your car dealer or mechanic.



CARKEEPERS

Relief from the burden of maintaining a car
24 HOURS A DAY 533-1356



What Is The State of Your 1987 Taxes?

If you are an Hawaii resident, in 1987 you could pay up to 42.02% in taxes to the state of Hawaii and to the federal Government. (Based on the maximum 1987 federal tax rate of 38.5% and the Hawaii state tax rate as of 10/1/86.) Now is the time to take a close look at the tax advantages of Seligman Tax-Exempt Fund Hawaii Series!

The Series Offers:

- INCOME EXEMPT FROM FEDERAL INCOME TAXES
- INCOME EXEMPT FROM THE PERSONAL INCOME TAX OF HAWAII

It's Time to Choose a Professionally Managed
Double Tax-Exempt Bond Portfolio

INVESTIGATE SELIGMAN TAX-EXEMPT FUND
HAWAII SERIES

EFHutton

E.F. Hutton & Company Inc.

2500 Pauahi Tower, 1001 Bishop Street
Honolulu, Hawaii 96813
(808) 521-2961

Yes! Send me a prospectus which contains more complete information on Seligman Tax-Exempt Fund Hawaii Series including information about the sales charges and other expenses. I understand that I should read it carefully before I invest.

MAIL THIS COUPON OR CALL 521-2961 TODAY!

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

DAYTIME PHONE _____ HOME PHONE _____

6 '87

Hors De Combat

In September, the Senate Judiciary Committee received the following statistics from the HMA survey on professional liability insurance:

- 73 physicians have already stopped providing obstetric care; 55 are considering eliminating obstetrics from their practice;
- 80 physicians have stopped performing surgery and 54 are considering stopping;
- 29 physicians have retired early . . . 259 are considering early retirement;
- 29 physicians have changed their specialty, and 66 are considering changing;
- 213 have limited their high-risk practice, such as for emergency, Medicaid and transient patients, and an additional 217 are considering doing so;
- 33 have dropped their malpractice insurance, and 81 are considering doing so.

The Hawaii Medical Association suggests the following three point plan for the current malpractice insurance crisis:

1) The Hawaii legislature must modify the tort system so that malpractice awards are more reasonable and objective, and so that the injured patient receives a substantial portion of any damage awards.

2) The State Insurance Commissioner's office must improve its monitoring of the insurance industry, to ensure that companies operate in a manner that reflects the most effective practices possible.

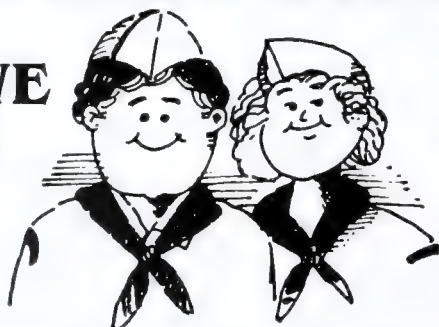
3) The medical profession must continue its efforts either to remove from practice those physicians delivering care below the community's standard of care, or to help upgrade their skills to meet the accepted standard of care.

In late August, the Advertiser described a lawsuit filed against an Aiea dermatologist for the death of a Pearl City woman during liposuction, but next day corrected its story with an article, "Getting it Straight", which revealed that the physician was not at fault, but that GASPRO employees had reversed the oxygen and nitrous oxide lines so that the woman received pure nitrous oxide rather than oxygen at the end of the surgery . . . A worried Aiea fellow-dermatologist dashed off a quick letter to the editor: "I wish to reassure all my valued patients, my colleagues in the medical profession, and my referring physicians that I am not the dermatologist involved and that I do not do cosmetic procedures including liposuction."

The Jury Verdict Research, Inc reveals that the typical monetary award to victims of medical malpractice was \$400,000 in 1985, more than twice the 1980 level. Of the 233 malpractice awards reported in 1985, 79 awards, or more than a third, were \$1 million or more. . . .

YOUR MONEY HELPS SCOUTING,

**AND WE
THANK
YOU.**



Aloha United Way

AT LAST.

A cure for the high cost of medical malpractice coverage.



Our 350 physician-members agree that PIP has decreased their annual medical malpractice costs up to 75 percent.

Let us help you with your medical malpractice concerns. Contact us today for more information. It's good to have a choice . . . It's great to make the right one.

The Hawaii Association of Physicians for Indemnification (HAPI) offers a doctor owned, tax-deductible malpractice protection plan to qualified physicians and surgeons practicing in the state of Hawaii.

HAPI's Physicians' Indemnity Plan (PIP) can provide you with \$1,000,000 of medical malpractice coverage.

Norman J. Slaustas
Administrator, HAPI and PIP
735 Bishop Street, Suite 311
Honolulu, Hawaii 96813
(808) 538-1908

PIP
Physicians' Indemnity Plan
HAPI
Hawaii Association of
Physicians for Indemnification





YES TO ALL THINGS
THAT MAKE HAWAII SPECIAL.

 **FIRST HAWAIIAN BANK**
We say yes to you. Member FDIC

12. Pediatrics Conference, fourth Thursday, 12:30-1:30 p.m., Harkness Board Room.
13. Surgical Conference, Tuesdays, 4:30-5:30 p.m., Kam Auditorium.
14. Tumor Board Conference, Tuesdays, 7:30-8:30 a.m., Kam Auditorium.

St. Francis Medical Center

1. Oncology Conference, Mondays, 7:30-8:30 a.m., Sullivan IV Classroom.
2. EENT Meeting, first Tuesday, 7:30-8:30 a.m., Sullivan IV Classroom.
3. Surgery Grand Rounds, first, second, and third Fridays, 7:30-8:30 a.m., Sullivan IV Classroom.
4. Medicine Conference, every Thursday, 8-9 a.m., Sullivan IV Classroom (for SFH staff members only).
5. Medico-Legal Conference, every fourth Thursday, 8-9 a.m., L.Q. Pang Auditorium. (Everyone welcome).
6. Hematology Conference, third Thursday, 12:30-1:30 p.m., Sullivan IV Classroom.
7. Visiting Professor Programs (contact Medical Education Office at 547-6497 for further information).

Straub Clinic & Hospital

1. Friday noon Conference, Fridays, 12:30-1:30 p.m., Doctors' Dining Room.
2. Patient Care Conference, second Tuesday, 5-6 p.m., Doctors' Dining Room.

Index to Hawaii Medical Journal Volumes 44-46, 1985-87

Compiled by Virginia Tanji of the
Hawaii Medical Library
Title Keyword Index

AIDS. AIDS, learning together, 45:78
AIDS—the learning together conference, 45:218
 The physician in society—1987: the relationship between AIDS and NUCLEAR WAR, 46:187
 Prevention and control of AIDS—an interim report from the AMA Board of Trustees, 46:293
Alanine Aminotransferase. Liver biopsies of blood donors with elevated alanine aminotransferase (ALT), 44:398
Ambulance. A limited review of the high-risk cardiac and high-risk trauma patients transported by two MICT, 44:477
American Medical Association. Address of the President (American Medical Association), 46:486
Anemia. Hemolytic anemia: experience in a community hospital, 44:129
Anemias. Hereditary anemias in Hawaii, 46:337
Aneurysms, Aortic. Resection of ruptured abdominal aortic aneurysms in St. Petersburg, Florida, 46:383
Anti-Thymocyte. Anti-thymocyte globulin therapy of hematologic disorders, 46:85
Aortic. Aortic valvuloplasty: a case report, 46:464
Aorto-Pulmonary. Traumatic aorto-pulmonary artery fistula, 46:379
Apnea. The home apnea monitoring program for newborns: the first 300 patients, 44:419
Asbestos. Asbestos removal from buildings: a review, 46:153
Behavioral. Behavioral treatment of palmar hyperhidrosis, 46:238
Bioethics. Bioethics: conference comments, 46:116
Biography. Benson, Robert Gideon, MD, (1906-1983), 44:270
 Fleming, James Foss, MD, 45:188
 Gordon, Benjamin Lee II, MD, 1940-1982, 44:472
 Kramer, Herman Piet, MD—over 80 and still practicing! 44:222

Luke, Hing Biu, MD—50 years and still practicing, 44:344
 Miyasaki, Seiichi, MD, 44:284
 Vasconcellos, Arthur Leslie, MD, 45:400
Blood Donors. Anti-HTLV III testing of blood donors and recipients, Hawaii experience, 45:391
 Liver biopsies of blood donors with elevated alanine aminotransferase (ALT), 44:398
Book Reviews. AIDS: the mystery and the solution, 44:241
 The AMA and U.S. health policy—since 1940, 44:349
 The best medicine, 45:196
 Cardiorespiratory disorders during sleep, 45:50
 Current emergency diagnosis and therapy, second edition, 45:51
 Current medical diagnosis and treatment, 45:360
 The good news about depression, 46:204
 Handbook of pediatrics, 14th edition, 44:202
 How to edit a scientific journal, 45:50
 Manual of clinical problems in pulmonary medicine, second edition, 45:212
 Manual of clinical problems in pulmonary medicine, second edition, 46:65
 On being a therapist, 46:479
 Orthostatic hypotension, 45:319
 The psychologically battered child, 46:312
 Treating type A behavior and your heart, 44:170
 Understanding the common cold, 46:312
 We are not alone: learning to live with chronic illness, 45:196
Breast. What have we learned from the Breast Cancer Detection Demonstration Project? 45:279
Breast Cancer. Breast cancer: treatment alternatives, 44:219
Brucella Canis. Human Brucella canis infection in Hawaii, 44:66
Calcium Channel Blockers. The role of calcium channel blockers in the management of cerebral ischemia, 46:473
Calculi. Van Sonnenberg sump hemiacidrin dissolution of staghorn calculi, 45:311
Cancer. Cancer risk on the island of Hawaii, 1973-1982, 45:254
 Community practice and cancer clinical trials: I. Relevance of creatinine clearances, 45:259

Community practice and cancer clinical trials: II. Detection of recurrences in rectal cancer, 45:261
 Community practice and cancer clinical trials: III. Value of platelet and differential counts, 45:262
 Community practice and cancer clinical trials: IV. Relationship between early toxicity and treatment outcomes in G.I. cancer patients, 45:263
 Depression in cancer patients: an overview, 45:272
 Incidence of non-melanoma skin cancer in Kauai during 1983, 45:281
 Natural killer cell function in cancer patients treated with natural leukocyte interferon-alpha, 45:276
 Natural killer cell function in cancer patients treated with natural leukocyte interferon-alpha, 45:394 (correction of 45:276)
 The origins of epidemiologic studies of heart disease, cancer and osteoporosis among Hawaii Japanese, 44:294
 What have we learned from the Breast Cancer Detection Demonstration Project? 45:279

Carcinoma. Gastric carcinoma in Hilo, Hawaii. An assessment of pathologic prognostic parameters, 45:266
Parathyroid carcinoma: a case report and review, 44:104
Cardiac. A limited review of the high-risk cardiac and high-risk trauma patients transported by two MICT, 44:477
Catastrophic. Catastrophic health insurance, 46:434
Cerebral Ischemia. The role of calcium channel blockers in the management of cerebral ischemia, 46:473
Chest. Chest pain and hypertension following myelography, 45:17
Child Abuse. The role of the medical home in child-abuse prevention and positive child development, 44:242
Child Abuse Law. Hawaii's Child Abuse Law: Hawaii Revised Statutes Chapter 350, 44:243
Clinical Pathologist's Easy Chair. Anemia, 44:164
 Effusions, 45:319
 Epstein-Barr virus (EBV) infection, 46:66
 Prothrombin time, 46:485
 Red-cell distribution width, 45:96
 Sputum cultures, 46:307

3. Cardiac Surgery Conference, fourth Tuesday, 4:30-5:30 p.m., Doctors' Dining Room.
4. Neuropathology Conference, fourth Saturday, 8-9 a.m., Doctors' Dining Room.
5. Surgical Morbidity and Mortality Conference, fourth Thursday, 7-8 a.m., Doctors' Dining Room.
6. Visiting Professor Conference, variable time throughout the month, Doctors' Dining Room.
7. Diabetes/Endocrinology Conference, first Wednesday, 12:30-1:30 p.m. Diabetes Center Conference Room, Palma 4.
8. Docs-on-Call Conference, third Wednesday, 7-8 p.m., Doctors' Dining Room.
9. Fluorescein Angiography Conference, third Thursday, 4:30-5:45 p.m., First Insurance Building, Room 950.
10. Fronk Clinic Educational Meeting, Variable monthly, 6:30-7:30 p.m., Fronk Clinic.
11. Video Conference, first Thursday, 12:30-1:30 p.m., Doctors' Dining Room.

For further information, call the Office of Professional Activities, 523-2311, ext. 8152.

Wahiawa General Hospital

1. CME Program, Tuesdays, 1-2 p.m., SNF Dining Room. For further information, call the Medical Staff Services Office at 621-8411.

Note: All conferences are subject to change. Monthly calendar is available upon request.

Clonorchis Sinensis. Treatment of Clonorchis sinensis in Hawaii's Laotian population—experience with praziquantel, 44:63

Colchicine. Therapeutic use of colchicine in thrombocytopenia, 45:221

Colon. Prevention of postoperative infections in colon surgery, 45:72

Colorectal. Colorectal cancer in Hawaii Japanese, 44:304

Communication. Cost-containment and communication with patients, 46:24

Congratulations! Editorials, 46:413

Contact Urticaria. The syndrome of immediate reactivities (contact urticaria syndrome) . . . III, 45:10

Contact Urticaria Syndrome. The syndrome of immediate reactivities (contact urticaria syndrome), 44:426

The syndrome of immediate reactivities (contact urticaria syndrome) II, 44:471

Cost-conscious. A cost-conscious approach to the evaluation of patients with low back pain, 45:447

Cost-containment. Cost-containment and communication with patients, 46:24

Cost-effective. A more cost-effective evaluation of syncope, 44:340

Cost-effectiveness. Cost-effectiveness in a frail and elderly population, 46:426

Costs. Medical economics, health-care costs/financing Hawaii, 1985, 44:352

Osteoporosis: will the use of new technology increase or decrease health-care costs? 46:199

Creatinine. Community practice and cancer clinical trials: I. Relevance of creatinine clearances, 45:259

Cryptococcosis. Fulminating pulmonary cryptococcosis responsive to sulfadiazine, 44:216

Delivery, Preterm. Preterm delivery in tourists: the Hawaii experience, 44:173

Depression. Depression in cancer patients: an overview, 45:272

Disciplinary. Official 1985 federation summary of reported disciplinary actions, 46:92

Editorials. The 100th, 85th, and 40th, 44:277

1983 experiences of the MMCP, 44:414

About women in medicine, 45:425

Abuse of the physician, 46:371

AIDS, 44:377

AIDS: report from AMA, 46:288

AMA! We're missing the boat, 45:303

The answer is no! 44:464

Are you healthy? Part I, 45:5

Are you healthy? Part II, 45:33

At Queen's 125th, 46:371

Auditing hospital bills, 44:336

The Australians, 44:461

Be your own editor, 44:211

Benefits of modern medicine, 45:122

Boxing as "sport," 46:149

Communication, 46:413

"Confounders," 44:277

The contingency fee, 44:119

Council capers, 45:300

Credo, 44:6

Cut the cost of immunizations, 45:425

A dedication to all nurses, 45:377

The dilemma in CME, 44:46

DRGs, 46:149

Effects of nuclear medicine, 45:346

Ethics in science, 45:300

The family physician, 44:197

The family physician, 46:458

Farewell, President Boyle, 44:464

A great idea, 44:277

Guest editorial, 44:373

Hawaii Medical Association position statement on heart-lung transplantation, 44:46

HMA salutes Mrs. Betty Katsuki, 46:9

HMWA offers support, 45:425

Ho'oponopono, 45:211

Hospice, 45:194

The impact on health, 44:281

Inconsistencies in public attitudes, 44:6

The "insert," 45:211

International Physicians for the Prevention of Nuclear War, 45:341

It's un-American—doctors' healthful tips limit their work volume, 45:172

Kauai's symposium: not to be missed! 46:48

Learning from cancer research, 45:253

Learning the ropes, 44:157

Lifetime Medical Television, 46:50

Lifetime Medical TV, 46:210

Logic versus tradition, 46:333

Medical ethics, 45:125

Mills honored by AMA, 44:46

The "missing link," 45:62

Modern Hawaiians and health, 45:33

More on cost-containment vs. quality, 44:9

More on noses, 46:9

"Le mot juste," 46:228

Music, medicine and mankind: a musing, 45:94

My Mana'o, 46:127

The "new" Queen's Medical Center, 45:303

The Nobel Prize for Peace, 44:414

Obstetrics on Molokai, 45:172

Osteoporosis, 46:182

Our new editor, 44:6

"Our" medical school, 44:238

Out-of-court settlement, 45:341

Overdoses, 46:182

Perinatal transmission of hepatitis B, 45:62

A personal account, 46:115

The physician who "goes bare," 44:197

Planning for long-term medical care, 46:412

Premies, 46:224

A proposed tri-hospital HMO or PPO, 44:334

The report of the results of the Fifth Medical Examination of Atomic Bomb Survivors . . . in U.S. and Canada, 45:345

Sad but necessary, 46:76

The school attendance law, 44:461

Self-referral for breast cancer, 45:253

Sigmoidoscopy on Kauai, 45:122

Sims on high-risk cases, 44:461

Special cancer issue, Hawaii Medical Journal, 45:251

Sports medicine, 46:112

Steven M. Moser, MD, 44:414

Sudden death, 46:458

Syndrome of immediate reactivities, 45:211

This is my mana'o, 44:211, 249, 336, 373; 45:5, 62, 94, 150; 46:6, 263

Victim's rights, 46:79

Vitamin E, 46:182

Welcome, Ray Higa, 45:68

Elderly. An alternative approach to care for the frail, vulnerable elderly in Hawaii, 46:428

Cost-effectiveness in a frail and elderly population, 46:426

Emergency Medical Services Program. Evaluation of selected aspects of the Oahu Emergency Medical Services Program, 44:135

Ethics. Ethics and the independent medical examination, 45:102

Extremity. Replantation in the upper extremity: a six-year experience in Hawaii, 44:384

Fertility, Male. Clinical tests of male fertility status, 46:347

Fertilization, In-Vitro. Pregnancy following combined microsurgical salpingoplasty, ovum recovery and in-vitro fertilization, 44:473

Fistula. Traumatic aorto-pulmonary artery fistula, 46:379

Flecainide. Flecainide overdose, 46:197

Florida. Resection of ruptured abdominal aortic aneurysms in St. Petersburg, Florida, 46:383

Flying. Flying and thrombocytopenia, 46:191

From the Department of Health. Environmentally related illness and injury, 46:284

From the Director of Health. Food irradiation, 46:152

Legislative efforts, 46:186

Leptospirosis in Hawaii, 46:330

New state laws on smoking and tobacco in Hawaii, 46:408

Physicians play crucial role in fight against AIDS, 46:375

Toxic substances and risk management, 46:227

From the President. AIDS! HTLV-III! HIV! 46:184

Changes in Medicare, 46:76

Closing words, 46:370

Common good, 45:421

Cutting cancer risk, 46:112

Dangers of adolescence, 46:284

Hawaii's health risks and concerns, 46:332

Hazards of cigarette smoking, 46:222

New medical issues face a new administration, 46:4

New president, 45:374

New year, 46:46

RICO, 45:338

Succeed by placing patients first, 45:171

Gastric. Gastric cancer among the Japanese in Hawaii: a review, 44:301

Gastric carcinoma in Hilo, Hawaii. An assessment of pathologic prognostic parameters, 45:266

Geriatric. Community long-term care for geriatric patients in Hawaii, 46:417

GI. Community practice and cancer clinical trials: IV. Relationship between early toxicity and treatment outcomes in GI cancer patients, 45:263

Globulin. Anti-thymocyte globulin therapy of hematologic disorders, 46:85

Haling, Kenneth, MD. Honoring Kenneth Halting MD, 46:449

Hawaii. Cancer risk on the island of Hawaii, 1973-1982, 45:254

Hawaii Academy of General Practice. Early history of the Hawaii Academy of General Practice, 45:399

Hawaii Medical Association. Recapitulation of House of Delegates Actions—128th Annual Meeting of HMA, 44:47

Summary of the proceedings of the House of Delegates at the 129th annual meeting of HMA, 45:180

Hazards. Modern health hazards in Hawaii, 45:174

Health. Modern health hazards in Hawaii, 45:174

Health Care Quality Improvement Act. Health Care Quality Improvement Act of 1986: a personal opinion, 46:310

Health Care. Response from HealthCare, 45:379

Heart Disease. Coronary heart disease, hypertension and stroke among Japanese-American men in Hawaii: the Honolulu Heart Program, 44:297

The origins of epidemiologic studies of heart disease, cancer and osteoporosis among Hawaii Japanese, 44:294

Hematologic. Anti-thymocyte globulin therapy of hematologic disorders, 46:85

Hemiacidrin. Van Sonnenberg sump hemiacidrin dissolution of staghorn calculi, 45:311

Hemoglobin. Red blood count, hemoglobin and red cell indices in healthy adult Orientals in Hawaii, 46:158

Hemolytic. Hemolytic anemia: experience in a community hospital, 44:129

Hemophiliac. Immune thrombocytopenia in a heterosexual male hemophiliac, 45:41

Hernia, Inguinal. Inguinal hernia repair using the shouldice technique—an experience of 101 cases, 44:201

Herpesvirus. The patterns of herpesvirus infection in a multiracial population. Kauai County, Hawaii, 1981-1985, 45:37

High-risk. A limited review of the high-risk cardiac and high-risk trauma patients transported by two MICT, 44:477

HMA. HMA testimony to Senate Judiciary Committee on medical malpractice insurance, July 1987, 46:385

HMA Auxiliary. Annual session, 45:361

Auxiliary names new officers, 45:45

HMA President. Acceptance speech by incoming HMA President Russell T. Stodd, MD, 45:18

HMA President's Message. Making a bankrupt system work, 45:122

- Terminal illness revisited, 45:96
- HMSA.** HMSA answers physicians questions, 45:21, 49, 132, 179, 305, 359; 46:34
- Home.** The home apnea monitoring program for newborns: the first 300 patients, 44:419
- Home Health Care.** Home health care: innovations in health-care delivery, 44:166
- Honolulu Heart Program.** Coronary heart disease, hypertension and stroke among Japanese-American men in Hawaii: the Honolulu Heart Program, 44:297
- Hospice.** Hospice services on Oahu, 45:186
- Howell, Milton M., MD.** HMJ honors Milton M. Howell, MD, 46:80
- HTLV III.** Anti-HTLV III testing of blood donors and recipients, Hawaii experience, 45:391
- Huna.** Huna of Hawaii: a system of psychological theory and practice, 45:213
- Hyperhidrosis.** Behavioral treatment of palmar hyperhidrosis, 46:238
- Hypertension.** Chest pain and hypertension following myelography, 45:17
- Coronary heart disease, hypertension and stroke among Japanese-American men in Hawaii: the Honolulu Heart Program, 44:297
- Hysterectomy.** Bilateral oophorectomy vs. ovarian preservation during hysterectomy: an assessment, 45:268
- Immigrants.** The immigrants' hospital: Kuakini Medical Center, 44:291
- Immunotherapy.** Failure of immunotherapy to prolong survival in chronic myeloid leukemia, 44:471
- Impaired.** The impaired physician, 46:289
- In Memoriam.** Tomita, Ted, 44:103
- Index.** Index to Hawaii Medical Journal, Volume 43, 1984, 44:37
- Infection.** Human *Brucella canis* infection in Hawaii, 44:66
- Infections.** Prevention of postoperative infections in colon surgery, 45:72
- Infertility.** Male infertility: the sperm penetration assay, 45:65
- Influenza.** Influenza A: prospects for prevention and control I: public health importance, epidemiology, primary and secondary prevention strategies, 45:347
- Influenza A: prospects for prevention and control II: immunization—current status and hope for the future, 45:352
- Influenza A: prospects for prevention and control III: influenza prevention today, 45:387
- Instructions.** Instructions to authors of the Hawaii Medical Journal, 46:12, 194, 232, 302
- Insurance.** Catastrophic health insurance, 46:434
- Interferon.** Natural killer cell function in cancer patients treated with natural leukocyte interferon-alpha, 45:276
- Natural killer cell function in cancer patients treated with natural leukocyte interferon-alpha, 45:394 (correction of 45:276)
- Japanese.** Colorectal cancer in Hawaii Japanese, 44:304
- Coronary heart disease, hypertension and stroke among Japanese-American men in Hawaii: the Honolulu Heart Program, 44:297
- Gastric cancer among the Japanese in Hawaii: a review, 44:301
- The origins of epidemiologic studies of heart disease, cancer and osteoporosis among Hawaii Japanese, 44:294
- Osteoporosis among Hawaii Japanese: a review of the major findings of the Kuakini Osteoporosis Study, 44:309
- Predictors of health in men of Japanese ancestry in Hawaii, 44:307
- Judd, Charles S. Jr., MD.** Charles S. Judd Jr., MD, 46:336
- Kahuna.** Kahuna lapa'au, 44:258, 358, 386; 45:132; 46:489
- Kauai.** Free flexible sigmoidoscopy on Kauai, 45:131
- Incidence of non-melanoma skin cancer in Kauai during 1983, 45:281
- The patterns of herpesvirus infection in a multiracial population. Kauai County, Hawaii, 1981-1985, 45:37
- Kuakini.** Osteoporosis among Hawaii Japanese: a review of the major findings of the Kuakini Osteoporosis Study, 44:309
- Kuakini Medical Center.** The immigrants' hospital: Kuakini Medical Center, 44:291
- Laotian.** Treatment of *Clonorchis sinensis* in Hawaii's Laotian population—experience with praziquantel, 44:63
- Laser.** Clinical applications of the argon laser, 44:52
- Law.** The 1% law, 44:248
- Letters to the Editor.** Congratulations! 46:8
- Handicapped physicians, 44:18
- Letter to the founding editor, 44:211
- Letter to the founding editor: response, 44:211
- Letter to the HMA President, 45:6
- Re: a personal account, 46:224
- Re: ABC Close Up "Diagnosis: Malpractice," 46:151
- Re: article on premies, 46:460
- Re: article: "male predominance," 45:304
- Re: articles in HMJ: Hawaii's health-care revolution, 45:212
- Re: cost-containment and quality of medical care, 44:337
- Re: December HCMS Board of Governors bulletin article by Frank A. Rogers, MD, 45:125
- Re: editorial on "A Personal Account," 46:460
- Re: editorial on DRGs, 46:151
- Re: fee for peer review required by MIEC, 45:378
- Re: Friends of the Medical School, 44:336
- Re: gratis publications, 45:6
- Re: high school athletics, 46:224
- Re: independent medical evaluation, 44:157
- Re: Kanyaku Imin special issue, 45:6
- Re: licensing exams, 44:157
- Re: Lifetime Channel, 46:210
- Re: Lifetime Medical Television series, 46:48
- Re: Lifetime Medical Television, 46:183
- Re: Malpractice insurance article, 44:337
- Re: Malpractice insurance costs, 46:116
- Re: Marijuana update, 44:119
- Re: Medical advertising sucks, 45:378
- Re: News & Notes miscellany column, 45:304
- Re: Osteoporosis, 46:372
- Re: UH Medical School, 44:464
- Re: University of Hawaii, 45:304
- Leukemia.** Failure of immunotherapy to prolong survival in chronic myeloid leukemia, 44:471
- Lifestyle.** A lifestyle change program associated with a major clinic and hospital, 44:90
- Liposuction.** Liposuction: removal of body and facial fat deposits by subcutaneous suction, 44:180
- Lithotripsy.** Extracorporeal shock wave lithotripsy, 46:10
- Liver.** Liver biopsies of blood donors with elevated alanine aminotransferase (ALT), 44:398
- Living Wills.** Living wills and dying in Hawaii, 44:20
- Lock-in.** Medicaid recipient lock-in program—Hawaii's experience in six years, 44:9
- Long-term Care.** Community long-term care for geriatric patients in Hawaii, 46:417
- Long-term care, Medicare, Medicaid and alternatives: a review, 46:436
- On long-term care insurance, 46:440
- Low back pain.** A cost-conscious approach to the evaluation of patients with low back pain, 45:447
- Marijuana.** Marijuana update, 44:24
- Male.** Male infertility: the sperm penetration assay, 45:65
- Malpractice.** HMA testimony to Senate Judiciary Committee on medical malpractice insurance, July 1987, 46:385
- Malpractice insurance—what can happen if you don't have it, 44:209
- Medical malpractice in the state of Hawaii (1979-1984), 46:19
- Marketing.** Health-care marketing, 44:345
- Medicaid.** Long-term care, Medicare, Medicaid and alternatives: a review, 46:436
- Medicaid recipient lock-in program—Hawaii's experience in six years, 44:9
- Medical Economics.** Medical economics, health-care costs/financing Hawaii, 1985, 44:352
- Medical Examination.** Ethics and the independent medical examination, 45:102
- Medical Home.** The role of the medical home in child abuse prevention and positive child development, 44:242
- Medicare.** Long-term care, Medicare, Medicaid and alternatives: a review, 46:436
- Millard, Robert D., MD.** HMJ requiem: Robert D. Millard, MD, 1898-1986, 46:117
- Multiracial.** The patterns of herpesvirus infection in a multiracial population. Kauai County, Hawaii, 1981-1985, 45:37
- My Mana'o.** What of the HMA's 131st? 46:481
- Myelography.** Chest pain and hypertension following myelography, 45:17
- Myeloid.** Failure of immunotherapy to prolong survival in chronic myeloid leukemia, 44:471
- Natural killer cell.** Natural killer cell function in cancer patients treated with natural leukocyte interferon-alpha, 45:276
- Natural killer cell function in cancer patients treated with natural leukocyte interferon-alpha, 45:394 (correction of 45:276)
- Newborn.** The home apnea monitoring program for newborns: the first 300 patients, 44:419
- Male predominance in persistent staphylococcal colonization and infection of the newborn, 44:389
- Nuclear war.** The physician in society—1987: the relationship between AIDS and NUCLEAR WAR, 46:187
- Nursing home.** Nursing home populations, then and now, 46:433
- Occupational.** Survey of occupational injuries on a large pineapple plantation during the harvesting season, 46:52
- Oophorectomy.** Bilateral oophorectomy vs. ovarian preservation during hysterectomy: an assessment, 45:268
- Ophthalmologist.** Hawaii's first ophthalmologist, 45:323
- Orientals.** Red blood count, hemoglobin and red cell indices in healthy adult Orientals in Hawaii, 46:158
- Osteoporosis.** The origins of epidemiologic studies of heart disease, cancer and osteoporosis among Hawaii Japanese, 44:294
- Osteoporosis among Hawaii Japanese: a review of the major findings of the Kuakini Osteoporosis study, 44:309
- Osteoporosis: will the use of new technology increase or decrease health-care costs? 46:199
- Ovarian.** Bilateral oophorectomy vs. ovarian preservation during hysterectomy: an assessment, 45:268
- Pain.** Psychological therapies for chronic pain, 44:124
- Paramedic.** A limited review of the high-risk cardiac and high-risk trauma patients transported by two MICT, 44:477
- Parathyroid.** Parathyroid carcinoma: a case report and review, 44:104
- Patient rights.** The right to die and the erosion of patient rights, 45:103
- Physician.** The impaired physician, 46:289
- Physician population.** Physician population, state of Hawaii, 44:377
- Pineapple.** Survey of occupational injuries on a large pineapple plantation during the harvesting season, 46:52
- Plantation.** Prevalence of smoking at a large sugar cane plantation in Hawaii, 46:468
- Platelet.** Community practice and cancer clinical trials: III. Value of platelet and differential counts, 45:262
- Postoperative.** Prevention of postoperative infections in colon surgery, 45:72
- Praziquantel.** Treatment of *Clonorchis sinensis* in Hawaii's Laotian population—experience with praziquantel, 44:63

(Continued on page 131)

Predictors. Predictors of health in men of Japanese ancestry in Hawaii, 44:307

Pregnancy. Pregnancy following combined microsurgical salpingoplasty, ovum recovery and in-vitro fertilization, 44:473

Prematures. Prematures enter school: a follow-up study, 46:235

Prognostic. Gastric carcinoma in Hilo, Hawaii. An assessment of pathologic prognostic parameters, 45:266

Pulmonary. Fulminating pulmonary cryptococcosis responsive to sulfadiazine, 44:216

Queen's Medical Center. A limited review of the high-risk cardiac and high-risk trauma patients transported by two MICT, 44:477

Rectal. Community practice and cancer clinical trials: II. Detection of recurrences in rectal cancer, 45:261

Recurrences. Community practice and cancer clinical trials: II. Detection of recurrences in rectal cancer, 45:261

Red blood count. Red blood count, hemoglobin and red cell indices in healthy adult Orientals in Hawaii, 46:158

Replantation. Replantation in the upper extremity: a six-year experience in Hawaii, 44:384

Rheumatic fever. The geographic distribution of rheumatic fever in Hawaii, 44:188

Right to die. The right to die and the erosion of patient rights, 45:103

Risk. Cancer risk on the island of Hawaii, 1973-1982, 45:254

Robin Anomalad. Presentation of the isochromosome trisomy 18 syndrome in an infant with the Robin anomalad, 45:126

Ruptured. Resection of ruptured abdominal aortic aneurysms in St. Petersburg, Florida, 46:383

Salpingoplasty. Pregnancy following combined microsurgical salpingoplasty, ovum recovery and in-vitro fertilization, 44:473

Shouldice. Inguinal hernia repair using the shouldice technique—an experience of 101 cases, 44:201

Sigmoidoscopy. Free flexible sigmoidoscopy on Kauai, 45:131

Skin. Incidence of non-melanoma skin cancer in Kauai during 1983, 45:281

Smoking. Prevalence of smoking at a large sugar cane plantation in Hawaii, 46:468

Sperm. Male infertility: the sperm penetration assay, 45:65

Sporotrichosis. A case report: lymphocutaneous sporotrichosis, 46:124

Sports. Athletic trainer feels public awareness is key to preventive medicine in sports, 46:122

HMA's 1986 Sports Symposium: a success, 46:121

Spurious. Spurious, 44:262

Staphylococcal. Male predominance in persistent staphylococcal colonization and infection of the newborn, 44:389

Stones. Endourologic treatment of urinary tract stones, 46:15

Straub Clinic and Hospital. Significant workers' compensation losses at Straub Clinic and Hospital, Inc.—Honolulu, Hawaii, 45:98

Stroke. Coronary heart disease, hypertension and stroke among Japanese-American men in Hawaii: the Honolulu Heart Program, 44:297

Sulfadiazine. Fulminating pulmonary cryptococcosis responsive to sulfadiazine, 44:216

Surgeon. A surgeon's prayer, 45:22

Surgery. Prevention of postoperative infections in colon surgery, 45:72

Symphalangism. Symphalangism and its introduction into Hawaii: a pedigree, 46:305

Syncope. A more cost-effective evaluation of syncope, 44:340

Thiazide. Thiazide-induced thrombocytopenia, 46:463

Thrombocytopenia. Flying and thrombocytopenia, 46:191

Hereditary thrombocytopenia, 46:56

Immune thrombocytopenia in a heterosexual male hemophiliac, 45:41

Therapeutic use of colchicine in thrombocytopenia, 45:221

Thiazide-induced thrombocytopenia, 46:463

Thrombocytopenias. Use of vinblastine-treated platelets in thrombocytopenias, 44:102

Thrombocytopenic Purpura. Anti-Rh (D) immunoglobulin use for immune thrombocytopenic purpura, 46:301

Tourists. Preterm delivery in tourists: the Hawaii experience, 44:173

Trainer. Athletic trainer feels public awareness is key to preventive medicine in sports, 46:122

Trauma. A limited review of the high-risk cardiac and high-risk trauma patients transported by two MICT, 44:477

Trisomy 18. Presentation of the isochromosome trisomy 18 syndrome in an infant with the Robin anomalad, 45:126

Urinary tract. Endourologic treatment of urinary tract stones, 46:15

Urinary tract infection. Evaluation and therapy of urinary tract infection: a critique, 45:306

Urticaria. The syndrome of immediate reactivities (contact urticaria syndrome) . . . III, 45:10

The syndrome of immediate reactivities (contact urticaria syndrome), 44:426

The syndrome of immediate reactivities (contact urticaria syndrome) II, 44:471

Valvuloplasty. Aortic valvuloplasty: a case report, 46:464

Van Sonnenberg sump. Van Sonnenberg sump hemiacidrin dissolution of staghorn calculi, 45:311

Vinblastine. Use of vinblastine-treated platelets in thrombocytopenias, 44:102

Vitamin E. A brief review of Vitamin E, 46:192

Women in medicine. I. Patient care issues, 45:426

II. Patient care issues, 45:427

III. Patient care issues, 45:428

IV. Playing by his rules, 45:431

V. Career choices and tensions: the woman internist, 45:432

VI: The "superwoman" syndrome, 45:436

Wong, Robert T, MD. The catalyst model: Robert T. Wong, MD, 46:260

Workers' compensation. Significant workers' compensation losses at Straub Clinic and Hospital, Inc.—Honolulu, Hawaii, 45:98

Author Index

Absinsay EL, 45:17

Adams EM, 46:312

Alvarez-Pacpaco E, 46:337

Antonelli MA, 45:428

Armstrong LJ, 46:428

Arnold HL, 45:211

Arnold HL Jr., 44:211; 45:174; 46:228, 460

Ash K, 44:173

Atienza FC, 46:116

Aziz S, 44:201

Azman BK, 44:157

Bass JW, 44:389

Beachy GD, 46:121

Bender CA, 44:104

Benfante R, 44:307

Berthiaume JT, 44:63

Betwee J, 45:212

Blaisdell K, 45:33

Blanchette PL, 45:426

Bogden PE, 44:337, 340

Bordow RA, 45:212

Botticelli MG, 45:447

Boychuk R, 44:173

Boyle JF, 46:486

Braun KL, 46:417

Breaden DG, 46:92

Breakey GF, 44:242

Breinich JA, 44:336

N. Care of Hawaii
and Nutritional Service

COMMUNICATION EXCELLENCE IN HOME CARE...

Registered Nurses are dedicated
communication and excellence

and, cost-effective and rewarding
options an option in health care they
possible.

COMMITTED TO IT

CALL 254-5841

Ave., Suite C-106 • Kailua, Hawaii 96734

be



**Saint Francis
Medical Center**

Discover the Difference



Brinkworth S, 45:37
Brown CA, 46:116
Brown J III, 44:389
Cashman RM, 45:98
Cashman TM, 44:90
Cassidy S, 46:383
Chait H, 45:41
Chang WW, 45:374, 421; 46:4, 46, 76,
112, 184, 222, 284, 332, 370
Ching C, 45:276, 394
(correction of 45:276)
Ching G, 44:216
Ching N, 45:276, 394
(correction of 45:276)
Chinn FJ, 44:9
Chock CM, 46:428
Chrisman BB, 44:180, 337
Chun AJ, 45:304
Chun LT, 44:188
Clapp PR, 45:311
Clever LH, 45:436
Cooper MA, 46:224
Coughlin SM, 46:468
Cruz MV, 45:276, 394
(correction of 45:276)
Dang WW, 44:477
Dang FJ, 44:241
Davidson M, 45:254
Davis HK, 45:102; 46:24
Dennis MN, 44:135
Diwan A, 45:41
Dodge WG Jr., 44:345
Doney K, 46:85
Dotson CR, 44:389
Doyle JR, 44:384; 46:305
Easa D, 44:173
Editorials, 46:50
Edwards RG, 45:126
Elizaga FV, 45:17
Elpern DJ, 44:426, 466; 45:10, 37
Enzenauer RW, 44:389
Fedje EW, 46:436
Fergusson DJ, 46:464
Flores JT, 44:52
Flowers RS, 45:22
Fournier-Massey G, 46:153
Frank JF, 45:218
Frohlich J, 45:391
Fryer GC, 45:432; 46:434
Fu D, 45:300
Fukunaga F, 46:66, 307
Fukunaga FH, 44:129, 164; 45:96,
319; 46:485
Gaal SA, 46:305
Galusha BL, 46:92
Gilbert FG Jr., 45:279
Glamb RW, 46:238
Gold MS, 46:204
Goldstein N, 44:52
Gordon LH, 44:157; 46:372
Grief M, 46:379
Hagino R, 46:199
Hall TC, 45:253, 259, 261, 262, 263
Hammar SL, 44:202
Hardman JA, 46:337
Hariharan A, 45:311
Harris MC, 44:472
Heilbrun LK, 44:294, 301, 304
Heintz LL, 44:20; 45:103
Herberman R, 45:276, 394
(correction of 45:276)
Higa R, 46:385
Howell MM, 46:312
Hsia YE, 46:337
Hsu J, 45:272, 431
Humphry JW, 46:417
Hunt WS, 44:209
Intaraprasong D, 45:311
Itagaki RK, 46:464
Jain A, 44:398

Since 1979, high standards of integrity and professionalism have enabled Kokua Nurses to become the top temporary medical placement company in Hawaii for nurses and para-professionals.

Kokua Nurses & a HOME HEALTH AGENCY

Specialists in Private Duty Nursing,
Hospital and Office Staffing.
Licensed and Certified for
Medicare/Medicaid Reimbursement

PS • Nurses Aides
al Assistants
urses • X-Ray &
icians • Physical
ional Therapists
Social Workers
rvision • Speech
hologists

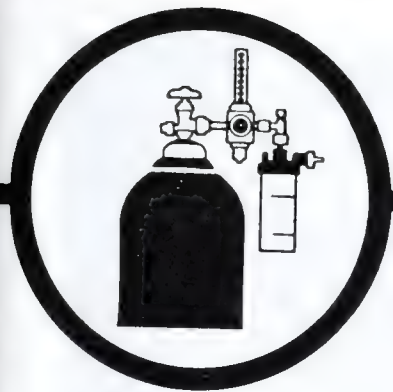
Nurses

OURS 536-2326

et



APPLICANTS WELCOME



CONTINUITY-OF-CARE™

24 HOURS A DAY

ining your expertise and ours for complete
our flexible Continuity-of-Care™ programs
esign the optimum home care program for you.

ii's most complete homecare supplier

**ABBAY
MEDICAL**

500 Ala Kawa Street
Honolulu, Hawaii 96817

845-5000

Reppun T, 44:398
Reuben L, 44:389
Rockwell T, 46:183
Rogers BJ, 45:65
Rogers DM, 46:197
Rogers TA, 44:464
Rose CJ, 44:90
Ross PD, 44:309; 46:199
Roth A, 46:48
Sakai A, 46:433
Sakbun V, 44:63
Sasaki DM, 44:66
Sasaki H, 44:90
Sato D, 45:276, 394
(correction of 44:276)
Satta S, 46:124, 197, 463
Schaefer MK, 46:192, 473
Schaefer RF, 46:473
Schatz IJ, 45:425
Schmitt RC, 45:323
Schwartz S, 46:379
Scotto J, 45:281
Scottolino AG, 45:268
Sengstacke FD II, 44:473
Sheridan MS, 44:419; 46:235, 460
Shitamoto B, 45:266
Sia CC, 44:242
Simonds RJ, 44:201
Sims JK, 44:135, 477
Smith J, 46:210
Smith RG, 44:135
Smyser AA, 45:186
Snodgrass SB, 46:151, 440
Soderdahl DW, 45:65, 306; 46:347
Sprague C, 44:24
Stablein D, 45:261
Stablein DS, 45:262
Stams UK, 45:311
Steinberg SM, 45:259, 261, 263
Stelmach SE, 44:18
Stemmermann G, 44:281
Stemmermann GN, 44:301, 304
Stitham MK, 45:378
Stitt PG, 44:166
Stodd RT, 44:119, 373; 45:18, 96,
122, 171, 338, 378; 46:79, 149, 371
Stone JL, 45:281
Strode WS, 46:15
Suehiro R, 44:291
Sumiyama Y, 45:72
Tasaka M, 44:291
Tashima WT, 44:201
Todd JS, 46:151
Tsurumi K, 45:72
Tsushima WT, 44:124; 46:238
Tupper CJ, 44:352
Vogel JM, 44:309
Wallach SJ, 46:182
Washnich RD, 46:199
Wasnich RD, 44:294, 309
Weiner RS, 45:131
Wellington JS, 45:304
Wilkinson WR, 46:337
Wing A, 45:425
Winn NE, 45:379
Wiswell TE, 45:126, 304
Withers J, 45:172
Wong C, 45:276, 394
(correction of 45:276)
Wong GK, 45:276, 394
(correction of 45:276)
Wong LM, 44:477
Wright LM, 44:477
Yamaoka RS, 44:135
Yanagihara E, 45:41
Yano K, 44:297, 309
Yarbrough WJ, 46:10, 15
Yim G, 44:173
Yokoyama H, 44:103
Young WK, 45:51

Jasinski DR, 44:6
 Jim RT, 44:102, 471; 45:221;
 46:56, 158, 191, 301, 337
 Johnson JN, 44:135
 Johnson L, 45:45
 Johnston JM, 45:41
 Judd CS Jr., 44:262
 Kagan A, 44:294, 297
 Kaku JM, 46:417
 Kaneshiro M, 46:85
 Kendro B, 44:248; 46:385
 Kolonel LN, 45:254
 Kosasa T, 44:173
 Kumar K, 46:479
 Landau KM, 46:383
 Langworthy JR, 46:52
 Larsen IJ, 46:305
 Lau JM, 46:379
 Lee H, 46:426
 Lee JB, 44:477
 Lemarchand L, 45:254
 Leonard T, 44:389
 Lewin JC, 46:152, 186, 227, 284,
 330, 375, 408
 Light MJ, 44:419
 Low G, 45:279
 Lum MK, 44:66
 Lumeng J, 46:385
 Magno J, 46:85
 Maligro D, 46:52
 Mankani HB, 45:360
 Mardfin JK, 46:19
 Mariani AJ, 45:311
 Massey DG, 44:170, 216; 45:50,
 196; 46:65, 153
 McGee RI, 44:90
 McKenna P, 46:224
 McKinney W, 46:337
 McNally P, 44:173

McPheeters GO, 44:104
 Michael JM, 46:8
 Mills GH, 44:349
 Morens DM, 45:347, 352, 387
 Morioka W, 45:41
 Morris A, 45:319
 Moser SM, 44:119
 Myers D, 45:427
 Na'ai D, 44:216
 Nagao J, 45:72
 Nakamura J, 45:41; 46:85
 Nakamura S, 45:72
 Nierenberg C, 45:125
 Nomura A, 44:294, 301, 304
 Nomura AM, 45:6
 Norenberg RG, 46:383
 O'Leary ML, 44:63
 Obrecht MB, 45:98
 Okihiko M, 44:277
 Paltin SJ, 45:213
 Pearson JH, 46:310
 Percy HS, 46:449
 Pestana A, 45:311
 Pien FD, 44:66
 Polskin LJ, 45:6
 Quisenberry W, 45:196
 Ramsey FB, 44:211
 Reagan R, 45:6
 Reddy V, 44:188
 Reed D, 44:307
 Reed DM, 44:297
 Reizner G, 45:281
 Reppun JI, 44:6, 8, 44, 46, 119, 157, 197, 211, 222,
 238, 249, 277, 284, 334, 336, 344, 373, 377, 414, 461,
 464; 45:5, 33, 62, 68, 94, 122, 125, 150, 172, 188,
 211, 251, 253, 300, 303, 341, 345, 346, 377, 399, 400,
 425; 46:6, 9, 48, 76, 80, 112, 115, 117, 127, 149, 182,
 187, 210, 224, 260, 288, 333, 336, 371, 412, 413, 458,
 481

CLASSIFIED NOTICES

To place a Classified Notice, call Leilani at 521-0021
 4 line minimum, approximately 5 words per line.
 Payment must accompany order.

EMPLOYMENT OPPORTUNITIES

WANTED! Practicing or retired physician to work part-time. All specialties may apply and **NO MALPRACTICE REQUIRED**. The Honolulu Military Entrance Processing Station (MEPS) needs physicians interested in working a few days a month, or week or two at a time. Basic medical exams, with no treatment, of recruits who are entering the armed forces. Full consultative services and radiologist. A first rate medical department staffed by well-trained military personnel located in the Prince Kuhio Federal Building. For further information call Dr. John Kustermann, Chief Medical Officer, at 541-2997 or 541-2580.

NOTICES AND ANNOUNCEMENTS

ALEXANDER Y.H. KIM & JANICE P. KIM Attys. at Law announce the relocation of their law offices (formerly 1124 Koko Head Ave.) to **KAIMUKI BUSINESS PLAZA**, 3615 Harding Ave., Ste. 206, Hon., HI 96816-3736. Ph. 737-2287 or 732-0522.
CONCENTRATING ON AUTOMOBILE ACCIDENTS SINCE 1956

"I just put more time in my day."

"If you're like me, time is your most precious commodity. And you probably spend 110% of it trying to be in three places at once."

"With a Honolulu Cellular Telephone, I can take the features and convenience of an office phone, wherever I go. For a lot less than you might think."

"Now I can organize all my activities while I'm on the road. Talk with the press. Coordinate meetings. Even put together a bed race. And have more time to go the extra mile."

CAROLE KAI, Founder,
 The Carole Kai International Bed Race

**Honolulu Cellular
 Telephone Company**

Hawaii's choice for quality cellular service
 1161 Kapiolani Boulevard, Honolulu, Hawaii 96814 545-4765

ERICSSON

ST

517654



3 1378 00517 6543

